

# A TEAM-BASED INFORMATION LITERACY EXERCISE

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## ABSTRACT

*The 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 information literacy along with the other competencies identified by AACSB. This paper presents a team exercise designed to help students expand their ability to gather and evaluate information from both library and Internet sources and to make judgments about the usefulness of the information providers. For schools that are accredited by the AACSB, outcomes assessment has become an important part of "Assurance of Learning" programs. The exercise provide in this paper includes a grading rubric that provides for the assessment of students' information literacy.*

## 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. This paper expands on information-literacy work by ABSEL researcher Vik (2006) by providing a team-based exercise that provides a framework for students to expand their ability to search for information. As a significant part of this exercise, students not only evaluate the information gathered, but, importantly, they analyze the information providers, as well. The experiential exercise contained in this paper is adapted for an accounting class. However, it can easily be adapted to another business discipline. In addition, a grading rubric for evaluating student performance is also provided.

The 65,000-member American Library Association in association with the Association of College and Research Libraries has provided a set of standards that define information literacy. These standards, which have been endorsed by American Association for Higher Education and the Council of Independent Colleges, describe the skill that an information literate individual should possess. To be information literate, an individual should be able 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].

These skills are important to a business professional who is often required to collect and evaluate the information upon which they will base their decisions and recommendations. This requires drawing a variety information from sources deemed to be reliable. Research has shown that 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 content providers, as well.

## THE EXERCISE

### PURPOSE AND OBJECTIVES

The team-based information literacy exercise described in this paper is presented in Appendix A. This exercise serves two primary purposes. First, it is designed as an experience that can increase students' information literacy by helping students achieve outcomes that are consistent with the recognized standards for information literacy promulgated by the American Library Association. These outcomes include determining the benefits and applicability of certain information search methods, evaluating the scope, content, and organization of information providers, and identifying effective approaches for obtaining the information needed [American Library Association, 2006c]. The second purpose of this exercise is to provide help students create a report that can be used to assess each student's level of information literacy. The assessment rubric is included in Appendix B. The assessment objectives of this experiential exercise are as follows:

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

This exercise uses student teams, a pedagogy that is well understood by ABSEL researchers. For example, ABSEL researchers have investigated, effective team formation [Butler and Parasuraman, 1977; Decker, 1995; Wheatley and Armstrong, 1997; Potosky and Duck, 2007; Wolfe and McCoy, 2008], managing student teams [Gamlath, 2008; Gentry, et al., 2003; Scherpereel, 2010], the nature of team decision-making [Wellington and Faria, 1990; Edman, J., 2006; Morita, et al., 2010], and the benefits of having students work in teams [Barney and Vik, 1985]. Wolfe and McCoy summarized that most educators agree that when students are assigned to teams, they benefit from group-based learning. Using student-teams for a report writing project, Barney and Vik (1985) found that students gained skill in performing group work and produced higher quality work. Barney and Vik concluded that the advantages far surpassed the disadvantages of spending greater class time on the project. Scherpereel (2010) cites a list of other benefits including the development of liberal learning skills, such as communication, negotiation, con-

flict resolution. In addition, Scherpereel argues that because teams are an essential part of the work environment, team-based learning is an important to business school educators.

### EXERCISE COMPONENTS

The example of this information literacy exercise that is presented in Appendix A has been adapted for an Intermediate Accounting III course which covers advanced financial accounting topics. In its introduction, this exercise establishes the scenario that students are part of a collaborative, professional team that has been asked to provide sources of information on a specific topic for their firm. They must organize their findings and report the results to their colleagues and client. To improve and standardize students' research reports, a set of guidelines to help students complete their research project. These guidelines are provided in Appendix B. As a result of standardizing students' research reports, these submissions can be used more effectively as a basis for assessing students' information literacy. In addition, these reports could be used as part of a student's portfolio of academic accomplishments.

This project requires that students reflect on their research activities, rather than requiring them to summarize the outcomes of their research. As a result, students are encouraged to investigate the nature and quality of sources of information available in their subject area. Based on their research activities, students are asked to describe, in detail, their most successful search strategies. By having team members with whom they may compare results, students can expand on their own personal experience. Team members can share their impression of which Internet search engines were most and the least effective in presenting useful, credible sites. They can also share their impression of the various types of information providers and differences in the nature of the information provided.

Written communication skill remains one of the most fundamental abilities is required in any work situation. This project gives students and opportunity to communicate the results of their research experience in written form. The report requires that they provide brief description of the issue addressed by their information search. Next, students are asked reflect on their research activities by answering a set of questions. 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. Finally, students must develop proper citations for resources from a variety of categories, such as the Financial Accounting Standards Board for an accounting class or the Securities and Exchange Commission for an investments course in finance. A variety of both library-

based and online 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.

## ASSESSING THE PROJECT

This project provides for an information literacy experience. Upon completion of the exercise, students will have researched a course related topic by exploring multiple methods of acquiring information, including databases, visiting the library stacks, and Internet search engines. Through this exploration students can improve 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. Appendix C contains an evaluation rubric that can be used to assess the extent to which students demonstrate information literacy through completing this exercise.

The evaluation rubric contained in Appendix C assigns points to key four features of the research report, the topic introduction (10 points), research results (40 points), the answers to information literacy questions (30 points), the writing style (10 points), and the conclusions and implications (10 points). Topic introduction is evaluated based on the comprehensiveness and accuracy of the description of the research question. The evaluation of the research results is based on whether the sources cited covered the suggested spectrum of available information available, the formatting of the bibliography, and the quantity, variety and credibility of the sources cited. Answers to the information literacy questions are assessed as excellent if they answer the questions fully; the responses were formed in a clear, logical manner; and the responses are thoughtful and profound. The writing style is assessed based on the paper being well organized, grammatically correct, and using clear language. Finally, the conclusions and implications are judged based on the extent to which they are insightful and reflect an enriched understanding of the topic.

## CONCLUSIONS

Cormany and Feinstein (2008) describe four elements that 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 for library excellence and also provides guidelines 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.

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## APPENDIX A

### INFORMATION LITERACY TERM PROJECT

As an accounting professional, you will engage in some form of written and oral communication as part of each normal workday. Frequently, you will collaborate on a team-basis, such as (1) preparing a “consulting” report for an advisory services client, (2) working with a group of a client’s employees on an audit, or (3) researching an accounting issue for a team of colleagues. This assignment is based on the third circumstance. Assume that your team has been asked to investigate a financial reporting issue for your firm. You are asked to communicate the results to your colleagues and firm client.

This project is designed to identify potential sources of information useful to business professionals. In researching an accounting topic, you will have the opportunity to develop and test the successfulness of your search strategies. You will use multiple methods to access sources of information, including data bases, visiting the library stacks, and at least three different types of Internet search engines. Finally, you will evaluate the quality of the information provided. Your finished project should contain the following items:

1. A brief description of the issue addressed by your search.
2. An appropriately-formatted bibliography that includes citations for 15 resources, or more. To receive a passing grade, at least one source must come from each of the following categories:
  - a) The FASB
  - b) The IASB
  - c) A printed journal or newspaper from the library
  - d) A book from the library or a description of a book available for sale online
  - e) A journal article from the *Business Source Premier* or *Academic Source Premier* databases
  - f) A newspaper or journal articles from the *LexisNexis Academic* database
  - g) An article from a public accounting firm’s Internet site or an investor education site with a “.com” or “.net” address
  - h) Footnotes from an EDGAR filing of annual or quarterly report, or a proxy statement
  - i) Internet educational sources with a “.edu” or a government source with a address “.gov” address
  - Please follow **one** of the citation formats listed in the Research Report Guidelines.
3. Documentation of your search results listed in part 2:
  - a) For books and printed journals and newspapers, include a photocopy of the cover and of the book or journal or the headline of the newspaper cited.
  - b) For internet articles, include a print-out of the **FIRST PAGE ONLY** for the source cited.
  - c) For database sources, include a print-out of the **FIRST PAGE ONLY** for the source cited and a print-out of your computer screen showing the database reference to that source. One easy way to do this is: 1) hold down the alt-key and press the print screen key, 2) paste the image of the screen into MS Word, and 3) print the image from Word.
4. Answers to the following questions presented in complete sentences.
  - a) What was your most successful search strategy? Why? Please include a complete description of how you selected search terms and refined your search.
  - b) Which Internet search engines were most effective in presenting useful, credible sites? Which search engine was the worst? Please include a description of the differences in search engines.
  - c) Which categories of resources will be MOST useful for your colleagues? Your client? Please explain your answers in terms of relevance and reliability.
  - d) Which categories of resources will be the LEAST useful for your colleagues? Your client? Please explain your answers.
5. A statement of your conclusions concerning the ease of researching your topic on the Internet versus through the library including comments on the variety of resources found, the quality of the resources found, the scope of the information available, and the ease of determining the reliability of the information.

Your team’s project evaluation will be based on your description of your research topic and its relevance of the topic to this course, the variety, quality, and quantity of sources cited, your responses to the questions in part 4, and your conclusions and implications. A grading scheme is provided on the last page of this handout.

Here is a sample topic list from Intermediate Accounting III. You may select one of the topics from the list below or, better yet, make up your own topic.

- A recent financial accounting scandal
- Accounting for derivatives
- Changes in financial reporting
- Comprehensive income
- Earnings per share
- Deferred tax assets and liabilities
- Estimating the fair value of stock options and other derivatives
- Financial Accounting Standards Board
- The proposed adoption of the IFARS
- Impairment of assets
- LIFO inventory changes
- Market risk disclosure requirements
- Price earnings ratio
- Recording a minimum pension liability
- Sale-leaseback accounting
- Segment reporting
- Statement of Retained Earnings
- Stock-based compensation

## APPENDIX B

### RESEARCH REPORT GUIDELINES

#### STYLE:

Follow the format used in an appropriate guidebook, such as *Accounting and Auditing Research: A Practical Guide* by Thomas Weirich and Alan Reinstein [Dame Publishing, 1999]. Another helpful guide to usage and style is *The Elements of Style*, by William Strunk, Jr. and E.B. White (bnpublishing.net, 2008).

#### CONTENTS:

Every paper should have the following major sections:

1. Title page
2. Body of paper
  - a) First section should be the "Introduction."
  - b) Middle sections should have assignment questions followed by answers.
    - What was your most successful search strategy? Why? Please include a complete description of how you selected search terms and refined your search.
    - Which Internet search engines were most effective in presenting useful, credible sites? Which search engine was the worst? Please include a description of the differences in search engines.
    - Which categories of resources will be **MOST** useful for your colleagues? Your client? Please explain your answers in terms of relevance and reliability.
    - Which categories of resources will be the **LEAST** useful for your colleagues? Your client? Please explain your answers.
  - c) Last section should be the "Summary and Conclusions."
3. List of references, organized by source and using one of the bibliography styles listed below.
  - a) The FASB
  - b) The IASB
  - c) A printed journal or newspaper from the library
  - d) A book from the library or a description of a book available for sale online
  - e) A journal article from the *Business Source Premier* or *Academic Source Premier* databases
  - f) A newspaper or journal articles from the *LexisNexis Academic* database
  - g) Article from CCH Database.
  - h) An article from a public accounting firm's Internet site or an investor education site with a ".com" or ".net" address
  - i) Footnotes from an EDGAR filing of annual or quarterly report, or a proxy statement
  - j) Internet educational sources with a ".edu" or a

4. Printouts from the articles and books

#### BIBLIOGRAPHY 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. Listed below are five citation styles plus a link for citations from electronic references in the APA style.

1. American Psychological Association: APA Style
  - a) Source: Purdue University
  - b) Web address: <http://owl.english.purdue.edu/owl/resource/560/01/>.
2. University of Chicago Press: The Chicago Manual of Style
  - a) Source: University of Chicago
  - b) <http://www.chicagomanualofstyle.org/home.html>
3. Modern Language Association: MLA Style
  - a) Source: Purdue University
  - b) Web address: [http://owl.english.purdue.edu/handouts/research/r\\_mla.html](http://owl.english.purdue.edu/handouts/research/r_mla.html)" style
4. AMA Style Guide
  - a) Source: HealthLinks: University of Washington
  - b) Web address: <http://healthlinks.washington.edu/hsl/styleguides/ama.html>
5. Turabian Style
  - a) Source: University of Wisconsin – Whitewater
  - b) Web address: <http://library.uww.edu/GUIDES/turacite.htm>
6. American Psychological Association: APA Electronic Reference Formats
  - a) Source: Purdue University
  - b) Web address: <http://www.apa.org/journals/webref.html>.

#### FORMAT:

All papers should be word-processed, printed on one side of 8.5 x 11 inch paper and be double-spaced, except for indented quotations. All pages, including tables, appendices, and references, should be numbered. All margins should be a minimum of 1-1/2 inches.

**APPENDIX C  
RESEARCH REPORT EVALUATION FORM**

**INFORMATION LITERACY EVALUATION CRITERIA:**

*5-point Evaluation Scale*

<u>Completely</u>	To a great extent	To a satisfactory extent	Inadequately	<u>Not at all</u>
5	4	3	2	1
		2	1	0

*10-point Evaluation Scale*

<u>Completely</u>	To a great extent	To a satisfactory extent	Inadequately	<u>Not at all</u>
10	9	8	7	6
		5	4	3
			2	1
				0

CRITERIA	POINTS
<b>TOPIC INTRODUCTION</b>	
• Your descriptions of issues were comprehensive and accurate	5
• The topic researched was relevant to Intermediate Accounting III	5
<b>RESEARCH RESULTS</b>	
• The sources cited covered the suggested spectrum of available information	10
• The bibliography was properly formatted and complete	10
• Quality of sources cited were from credible sources and were not redundant	10
• Quantity of sources cited met or exceeded the minimum required	10
<b>ANSWERS TO INFORMATION LITERACY QUESTIONS</b>	
• The questions were answered fully	10
• The responses were formed in a clear, logical manner	10
• The responses were thoughtful and profound	10
<b>WRITING STYLE, GRAMMAR, PUNCTUATION, AND SPELLING</b>	
• Your paper was well organized, grammatically correct, and used clear language	10
<b>CONCLUSIONS AND IMPLICATIONS</b>	
• The conclusions were insightful and reflected an enriched understanding of your topic	10
Total points	100