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# Teaching faculty's perspectives on business information literacy

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## Teaching Faculty's Perspectives on Business Information Literacy Abstract:

#### **Purpose**:

Effective integration of information literacy skills into the business curriculum requires the development of collaborative partnerships between teaching faculty and librarians. Developing a good partnership requires an understanding of the teaching faculty's perspectives.

#### Methodology:

A survey was sent to business teaching faculty at California State Universities to determine their expectations in regards to student information literacy skills.

#### **Findings:**

Writing a report or project that required an in-depth research is one of the major expectations. All faculty surveyed expect students to use library research for their assignments.

#### **Originality/value:**

Based on literature review, no research or study of this scale has been conducted before. Business faculty and librarians will be able to use these findings in developing guidelines for effective teaching methods, appropriate assignments and research tools.

**Keywords**: business education, information literacy, lifelong learning, faculty-librarian collaboration, library research, library instruction

Category: Research paper

#### Introduction

Finding, evaluating, and using information efficiently are among the most significant challenges to all professions, particularly in the business world. Drucker said, "The organization of the future is held together by information - - - working in such an organization will require literacy to obtain the necessary internal and external information to do our jobs" (2001, p. 16). In this information era, researchers have studies the impact and cost of not finding appropriate information. According to a report from IDC, "the time spent looking for and not finding information costs a company a total of \$6 million a year. IDC is a global technology media, research, and events company. The cost of reworking information because it hasn't been found costs that organization a further \$12 million a year;" and the success rate in finding the right information at the right time is 50% or less (Feldman, 2004). Another study by OutSell, a leading information industry research and advisory firm, reveals that "the salary cost (in reworking) alone to American businesses is \$107 billion a year," it further states that "this is an \$107 billion information literacy problem" OutSell (2004).

Little is known about the information literacy skills of business students, who will be future business leaders. Whether students are properly prepared to be information literate is a concern not only for business schools but also for academic librarians who work with business professors and students. According to the Association of College and Research Libraries (2000), information literacy is a set of abilities requiring individuals to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information."

To determine the expectations of the business teaching faculty in regards to student information literacy skills, a pilot study was conducted at the San Jose State University. This study was further expanded to the business teaching faculty in the California State University system.

#### **Literature Review**

The integration of information literacy skills into the business curriculum is a growing concern in colleges of business and in the academic libraries that serve them. The following articles and reports are representative of documentation that demonstrates the need for integrating information literacy skills into the business curriculum. An extensive review of articles on business schools' commitment to integrating information literacy into the curriculum was done by Hawes. He reviewed articles on the commitment of business schools to integrating information literacy into the curriculum. The author found that as of that time the concept of information literacy had not "percolated up in the collective conscience of the business school leadership to the point of becoming a salient issue." (Howe, 1994, p. 9)

The National Forum on Information Literacy (NFIL) (1989) studied the information literacy needs of students, businesses, and citizens in the information age, and produced a report on the necessity of integrating information competence concepts into the curriculum and into workforce training programs. Almost 10 years later NFIL (1998) revised its original study and produced an update that listed recommendations aimed at colleges, librarians and business leaders. These recommendations included collaboration of teaching faculty with librarians/subject specialists; support of educational accrediting agencies in the area; encouragement of school reform movements

to include information literacy skills in the curriculum and the demonstration of the need for these skills to business leaders.

Several recent reports and articles have made important connections between information literacy, the classroom, and the workplace. Breivik (2000) discussed the value of information cliteracy as a linking tool between the school and the community. The main accrediting agency for colleges of business, Association to Advance Collegiate Schools of Business (AACSB) (2004) issued criteria for all aspects of teaching business, including guides to improve critical thinking in the area of communication. Critical thinking is an essential part of information literacy. For example, in a class assignment, after searching for information, students need to evaluate the authority, quality, and relevance of information for the assignment. Palomba (2001) used these criteria to demonstrate how teaching faculty can include assignments that encourage students to master information literacy skills. Kryder (1999) discussed projects that help students develop critical thinking skills, and gave several examples that incorporated information literacy skills to class assignment. Hiemstra (2002) developed assignments that include collaboration with the librarian-subject specialist. Objectives were achieved when the librarian was involved in developing assignments that helped teach how to identify, appropriately use, and evaluate sources. Henninger (1996) pointed out the impact of an increasing explosion of information making the collaboration of the professor and the librarian a necessity. In one example, rather than focusing on techniques for finding articles, the entire library workshop emphasized on reviewing and evaluating information to reflect on the value of the information for the research report.

Requiring the use of library resources for assignments is a powerful tool that faculty can use to develop their students' information literacy skills. Atkinson and Figueroa (1997) reported that when professors in collaboration with librarians included library skills training, the students used better quality resources and significantly improved their research skills. This finding is important in light of a work by Mann that discussed the "Principle of Least Effort" that was originally articulated by G. K. Zipf in 1949. This principle, when applied to students and their research methods, reported, "that most researchers even 'serious scholars' will tend to choose easily available information sources, even when they are objectively of low quality --- will tend to be satisfied with whatever can be found easily in preference to pursuing higher-quality sources whose use would require a greater expenditure of effort." (Mann, 1993, p. 91). With this principle in mind, professors working with librarians need to consider designing assignments that require high quality information sources. The easy access to the Internet, the explosion of the volume of information, and the predominant use of search engines such as Google make information literacy skills a necessity if students are to find sources of the best quality not least effort.

Sigala (2003) pointed out that the hospitality and tourism curriculum, one specialized area in business studies, is beginning to recognize the value of information literacy skills. Students need to be adaptable, flexible, and effective workers. They also need to be knowledgeable in not only evolving business practices but also cultural and social issues. Information literacy skills acquired in college improve a student's success and lead to lifelong learning ability that can adapt easily to a constantly changing business environment.

The need for lifelong information literacy skills is the hallmark of Peter Drucker's work. Drucker (1995) discussed the changes in business and the need for a company strategy that was based on information from many sources. This information should make executives question assumptions, ask the right questions, and integrate this information into decision-making. Company executives need to understand that information is not only a record of past accomplishments but also a powerful tool for determining future action.

Kanter (1996) reported that companies are beginning to realize that information is a competitive resource and also a resource to use in attaining the long-range objectives of a company. This realization can be achieved by an ongoing educational plan. A successful plan will link information literacy skills to the vision of the corporation. Oman (2001) revealed that this educational plan is imperative for two reasons: 1) the constantly evolving nature of information and information technology; and 2) the direct correlation between information literacy skills and business improvement.

If the quality of the information is not questioned, there can be disastrous effects on the life of a corporation. Several case studies on the impact of the lack of information competence in the workplace were discussed (Cheuk, 2002). The impact on a company can be crippling. Karl Albrecht (2003, p. 189) argued that companies need an information quality revolution:

Information quality is the flip side of virtually every other kind of quality issue you can name, and the reduction of information-related costs could present an enormous opportunity to increase return on investment for many organizations.

#### **Background and Method**

#### I. Pilot Survey at San Jose State University

In fall 2001, two business librarians at SJSU reviewed issues concerning business student information literacy skills. One course that all business students are required to take is Business 100W, a course that incorporates writing and research skills and is the mandatory junior level writing course. To explore issues of integrating information literacy skills into the curriculum, a pilot project was conducted at San Jose State University in spring 2002 to find out: 1) the best practices in providing information literacy sessions for Business 100W classes, 2) teaching faculty's expectations of students' information literacy skills, and 3) how librarians and classroom teaching faculty can collaborate effectively to improve information literacy and library research skills.

A survey was distributed to all business faculty members who were teaching 100W classes. The survey (Appendix A) asked faculty for the following information:

- 1) List three business skills students should know by the end of the semester.
- 2) What projects are assigned for which students are expected to use library resources?
- 3) What can librarians do to help faculty and students?

It also asked faculty to rank business information literacy criteria that were developed by the California State University Chancellor's Office (CalPoly, 2001). CalPoly San Luis Obispo hosts the site.

With a 92% return rate of the SJSU survey, the results are very representative. In item number 1, more than 50% of the respondents listed library research skills and plagiarism. In item number 2, all faculty expected students to use library research for their assignments. In item number 3, all respondents, except two, expected a session on effective use of the library and library resources (Easter & Wu, 2002).

At San Jose State, faculty teaching Business 100W are expected to prepare students for careers in business by emphasizing research and reading/writing skills. They teach current principles and forms of exposition, logical arguments, and persuasion in business communication

--- with emphasis on problem solving, critical thinking, decision-making, and research. Every semester, approximately 30 sections are offered with about 25 students in each section; however, enrollments were increased to 30 starting fall 2003 due to budget constraints.

Most Business 100W professors include a library/information literacy session in their syllabi. Librarians give students a 60 to 70-minute lecture on how to effectively research for their assigned topics and how to use various search tools and library resources. The lecture also includes demonstrations of business databases, proper use of the APA or MLA style formats, citing of research materials, and issues of plagiarism. Independent library research is required for homework that includes both oral and written demonstrations of the students' abilities to locate, analyze, and evaluate supplementary resources. This lecture is followed by students' consultations with librarians to meet individual needs. Students write reports based on their research and are graded on their ability to conduct thorough research, integrate ideas from various sources, and correctly cite and reference their sources.

In a separate study conducted at SJSU, the survey showed that there was a 16% decrease in the use of non-library websites after library instruction. Most importantly, the students indicated their greater confidence with self-efficacy on strategic analysis (Roldan & Wu, 2004).

#### II. California State University Survey

Encouraged and confident with the high return rate at 92% from the initial survey, two business librarians decided to expand this study to other sister campuses in the California State University (CSU) system. All 23 campuses in the CSU system offer business/management programs. According to fall 2001 system-wide data from the Chancellor office (*Statistical Abstract*, 2003), 56,554 of the total 311,566 undergraduate enrollment is business and management majors, which translates to 18.15% and is the highest concentration of all disciplines.

Not all 23 campuses, however, offer junior level writing classes. Eighty-two business faculty recommended by the business librarians from their campuses were surveyed. They represent all business disciplines from 16 campuses: accounting, business

communication, decision science, finance, marketing, computer or management information systems, organization and management.

Sixty-one (74.39%) returned their complete surveys; 49 are full-time and 12 are part-time with a total of more than 750 years of teaching experience. The longest is 40 years and the shortest is one year. Among those who returned the complete survey, 57 (93.44%) have worked with a librarian to meet various needs. Forty-eight (78.69%) requested to have a library instruction/lecture, 46 referred students for assistance from a librarian on their term projects, 34 communicated on library collection/material request, 24 recommended these services to their colleagues. For those who have not worked with a librarian, they replied, "Students were very unresponsive to library visit." "We have no occasion to communicate." "The library has lacked the necessary resources." The response rate for this survey is unusually high probably because faculty recommended by business librarians have an interest in and relationship with the library.

#### Results

The primary expectation or request from teaching faculty is to have librarians: 1) conduct an over-all orientation in the use of available library resources and search skills; 2) provide tools, such as bibliography/handouts or website in the use of library resources. They are followed by other top three expectations: 1) assist with searches using available resources; 2) create a web page showing major sources and research topics; 3) possibly using PowerPoint presentations on updated library information finding tools. Other expectations are: responding to students' questions; keeping office hours for student assistance; maintaining web pages; also, encouragement and assistance with projects through e-mail.

As for skills that students should acquire, writing skills are the number one expectation, followed by critical and analytical thinking, research skills, speech & oral presentation, and data analysis (See Table 1).

Number of faculty listing skills	Skills students should know
32	Writing skills
31	Critical & analytical thinking
27	Research skills
22	Speech & Oral presentation
16	Data analysis
10	Problem solving
4	Understanding historical context, laws and current news
2	Team skills

Table 1. Top 6 Skills Students Should Know:

Results from the CSU survey correspond with pilot study findings at San Jose State University, although not all CSU faculty participated in this survey are teaching a writing class.

These rankings in Table 1 also correspond with the top five answers in question number 3: class assignments that required research –

- In-depth research project and/or case study, or a group research project
- 2. A well-researched business proposal and/or marketing plan

- 3. A series of smaller writing assignments that require outside reports/articles
- 4. Analytical report that includes research
- Audit of a company's financial situation: background and outsider reports

Other assignments in the order of priorities include a presentation or oral report of

a researched solution for a problem, a competitive analysis for business opportunity, a research investigation of a topic using only electronic database sources, a legal case and analysis, a short informal memo report, a letter of application or resume. The complete list of assignments that required the use of library resources is in Table 2.

Frequency	Assignment
23	An in-depth research project and/or case study, a group research project on a given topic
19	A well-researched business proposal/ marketing plan or an international marketing plan
11	A series of smaller writing assignments that require outside reports/articles
8	An analytical report which includes research
7	An audit of a company's financial situation including financial background and outsider report from various sources
6	An oral report or presentation of a researched solution for a problem/opportunity
3	A competitive analysis for business opportunity

Table 2. Projects Assigned that Required the Use of Library Resources

2	A research investigation of a topic using only electronic database sources
2	A prepared legal case brief/ Some legal research
1	A research investigation of a topic using library text sources, writing a management report, letter of application, resume, etc. All with one vote.

The top five rankings among the 15 business information literacy criteria follow: company information, current awareness, presentation tools, industry information, and international information. Company information is considered the most important element, which includes financial reports, background and history, competition, and ratios. It is followed closely by current awareness. The top 10 rankings are in Table 3.

Value	Criteria
27	Company Information
26	Current Awareness
18	Presentation tools (graphs, etc.)
15	Industry Information Developments, trends
13	Country information
12	International Information
11	Local, State, Federal Laws and Regulations
10	Regulatory Information
10	Census/Demographics
8	Industry Classification

Table 3. CSU Business Information Competency Criteria Ranked by the Faculty

In response to the survey and based on the analysis, a series of projects are underway at SJSU library to develop online tutorials and research tools. The first project: Company Information Tutorial (CIT) was launched in fall 2004 at

http://tutorials.sjlibrary.org/#business. If requested by the professor, students need to sign in to finish a quiz on how to research company information. The result will be sent to the professor. Others can visit as a guest to by-pass the quiz. A matrix to help students keep aware of the current development in research and the business world is available at http://www.sjsu.edu/~dwu/CurrentAwareness.html. Another project: 100W library toolkit is in the progress. This toolkit will provide an one-stop source page with information on bibliography citation, style manual, grammar and writing tips, primary vs secondary sources, copyright/plagiarism issues.

#### Conclusions

Information literacy skills can be integrated into the course plan to prepare business students for lifelong learning beyond graduation. Educational institutions must prepare students for the very competitive workplace. As demonstrated by the SJSU and CSU survey results, librarians and teaching faculty can work collaboratively in developing tools and lecture plans to meet the expectations and to achieve the goals. However, great challenges and opportunities remain. The volume of information being produced and constant changes of access methods require continuous efforts in this collaboration. Judging by the results, librarians can develop and design a lecture plan that is more focused to meet the objectives of teaching faculty.

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Appendix A: the Survey

- I. Are you a \_\_\_\_\_ Full-time or \_\_\_\_\_ Part-time faculty with \_\_\_\_\_ years of teaching experience?
- II. List 3 business skills students should know by the end of your class (for example, student writing skills, critical thinking, plagiarism.)
- III. What project(s) are you assigning for which you expect your students to use library resources?
- IV. What can librarians do to help you and your students to meet this needs? (such as preparing a bibliography? a personal tour for you? a web page?)
- V. Have you worked with a librarian in your institution? <u>Yes</u> No If yes, what does the librarian do to support you and your students?
  - a. \_\_\_\_ In-class lecture/instruction on information competence, research and library skills, database demonstration, etc.
  - b. \_\_\_\_ Refer your students for assistance from the librarian on their term projects
  - c. \_\_\_\_\_Library collection/material request

If no, can you please share your thoughts with us?

- VI. The following are Business Information Competencies criteria developed by the CSU Chancellor's Office. Please check those that are most important for your class:
  - 1. Business Plans/Entrepreneurship
  - \_\_\_\_\_2. Census/Demographics
  - \_\_\_\_\_3. Economic Census
  - \_\_\_\_\_4. County business patterns
  - \_\_\_\_\_5. Company Information
    - \_\_\_\_\_5.1 Financial reports
    - \_\_\_\_\_5.2 Background and history
    - \_\_\_\_\_5.3 Competition
    - \_\_\_\_\_5.4 Ratios
  - \_\_\_\_\_6. Currency Data

- 7. Current Awareness
- 8. Economic Indicators
- 9. GIS (Geographical Information Systems)
- \_\_\_\_\_10. Industry Classification
  - SIC/NAICS/International Harmonics
- \_\_\_\_\_11. Industry Information Developments, trends

  - \_\_\_\_\_11.1 Projections \_\_\_\_\_11.2 Financial Ratios
  - 12. International Information
    - \_\_\_\_\_12.1 Export/Import, Trade barriers
    - \_\_\_\_\_12.2 Country information
- \_\_\_\_13. Presentation tools (graphs, etc.)
- \_\_\_\_\_14. Regulatory Information
- \_\_\_\_\_15. Local, State, Federal Laws and Regulations
  - \_\_\_\_15.1 Certification
  - \_\_\_\_\_ 15.2 ADA Standards