

ACADEMIC PREPARATION OF CORPORATE MANAGERS THROUGH THE INFUSION OF INFORMATION LITERACY PROGRAMS ACROSS CURRICULUMS

Larry Treadwell, Reference/Instruction Librarian, St. Thomas University, Miami, FL
Dr. Bob DeYoung, Assistant Professor, St. Thomas University, Miami, FL

ABSTRACT

In that academia plays an important role in the development of business skills, the infusion of information literacy programs in all academic curriculums provides an environment where literacy information skills can be developed and tested to ensure information acquired for professional use is located and processed efficiently to make certain opportunities are not missed. This article identifies four approaches to implementing an information literacy program: (1) an information literacy mandate clearly stated through policy, (2) the creation of Librarian/Faculty liaison position(s), (3) funding for faculty to identify book/video purchases relevant to their areas of study to be used as a component of the information literacy program and (4) the adoption of a two-pillar approach to the information literacy initiative to ensure that no group of students are excluded, and consequently, unexposed to the library and the vast array of resources available to them through the library. Academic preparation of corporate managers demands an infusion of information literacy programs across curriculums by mandating a library component in all course syllabi, thereby creating a depth and breadth in the development of business skills that instill and uphold the value of information literacy

INTRODUCTION

“The foreknowledge required to be in complete control of events is gained by acquiring complete information, by anticipating the ensuing situations” - Sun Tzu (Ames, 1993).

There is a newfound recognition in academia that correlates information literacy as a strong predictor of professional success. It is critical for universities to develop student business skills that uphold the value of information literacy, while creating opportunities for students to understand and evaluate the quality of the sheer volume of available information (Kuh & Gonyea, 2003). Information literacy skills are imperative in today’s emergent workplace. Information acquired for professional use must be located and processed efficiently to ensure opportunities are not missed.

This effort is not merely the responsibility of the librarian or the faculty, but requires a collaborative effort between the two positions. The traditional roles, separate and distinct, must work together to ensure relevance and applicability to the needs of the student. The infusion of information literacy programs into university curriculums, an issue that dominates the landscape, offers both faculty and librarians the opportunity to transform interaction into new realities and new relationships, both in and beyond libraries, which will assist them in their work to promote information literacy initiatives across college and university campuses” (Lampert, 2003).

While communication among faculty, librarians and students is fundamental to the process of information literacy, the effort will ultimately groom “students for the realities of academic research at the collegiate level or the realities of information seeking in the workplace” (Hinchliffe, 2003).

Without question, certain skills are necessary to conduct business research. The advancement of technology and the Internet has opened the door to tremendous research possibilities. Yet, library anxiety is often an obstacle to that and must be addressed and overcome. Higher education should identify various methodologies to reducing this anxiety, e.g. one-on-one library staff contact or computer-based tutorials. Whatever method employed, the objective should be to reach the greatest number of students within the constraints of the university (Van Scoyoc, 2003).

Information literacy should become a life-long learning process, where librarians and faculty make a conscious effort to contribute to experiential learning focusing on information literacy in conjunction with personal, professional and academic success. Hinchliffe (2003) identifies that “developing information literacy skills through academic programming requires continuity in skills instruction from one grade level to the next.” In that information literacy skills are perishable, it is crucial that the collaborative effort crosses the curriculum and does not become a sporadic effort of merely a few faculty and librarians. “Skills are best taught for real purposes in content areas rather than as discrete skills removed from the real world” (Hinchliffe, 2003).

Moving from the classroom into the library environment introduces the student to a technology-rich setting, enhancing the process of learning through technology. The library no longer is a classroom replacement, but rather a place where students become interested and motivated, seeing themselves as informed consumers of research. Students discover the superiority of legitimate online research databases, whereas before they conducted information searches using generic Internet search engines (Loertscher & Woolls, 2003).

This effort does not come free. Hammersmith reports, “Our challenges are to finance the new technologies, to incorporate them into our teaching, learning, and scholarship, and to teach information literacy so that our students and the public can discern authentic information from pseudo-information” (Currie, 2003).

Williams and Walters (2003) states the issue clearly: “Faculty can generate enthusiasm for research service initiatives and influence the use patterns of students, which will result in improved information-seeking skills and increased use of library resources. In addition, library staff can coordinate and nurture instructional partnerships with faculty and students from which both prosper intellectually.”

This article will identify the importance of creating a mandatory library component in all course syllabi and the positive impact that such a mandate will have on the business student’s professional success. As noted earlier, it is critical that the effort is not sporadic, but traverses the curriculum to ensure depth and breadth of student skill development.

IMPLEMENTATION

The authors will focus specifically on four avenues that a university can travel to ensure compliance and success. This does not suggest these approaches are conclusive or preferred, but merely identifies how one university addressed the issue.

To ensure a clear understanding of expectations, consider incorporating the mandate in the Faculty Handbook. One would not be surprised to expect the librarian to accept this partnership with open arms; while a diminished excitement on the part of faculty is more likely. Particularly detailing, through example, how the library component fits into the syllabus is important. By using a library component syllabus heading titled “Library Use/Information Literacy Assignment,” one is provided an objective understanding for the need to “construct an appropriate assignment with defined learning outcomes that utilize University provided library/learning resources” (St. Thomas University Faculty Handbook 2002-2003). Several pages of sample library assignments should then be provided. These samples cross a spectrum of curriculum. The Business Department example, modified for brevity in presentation, is described in Figure 1.

The second approach is the creation of Librarian/Faculty liaison position(s). This position establishes a specific point of contact between faculty and the library, allowing the collaborative effort to strengthen while diminishing the frustration that results from being shuffled from one person to the next. The liaison, typically a research librarian, can increase efficiency of the needs of faculty by focusing on the availability and limitations of resources relevant to information literacy. The liaison also ensures compliance with the library component requirement.

Faculty may be resistant to implementing information literacy components because the implementation may be viewed as problematic or inappropriate. The fact is that it is possible for faculty in any discipline to incorporate information literacy into the curriculum. It is here that the role of librarian liaison becomes so critical. The librarian should work with the faculty to determine which courses are best suited for information literacy assignments and corresponding instruction. This can be accomplished through discussion, by reviewing the course syllabi, the course requirements and objectives, and a review of the available resources within the library. While it is technically

Figure 1: Sample Library Use/Information Literacy Assignments

Business Department

Using APA style, a ten page paper will be written on an industry of your choice. The paper should include the following:

- Current trends, issues and outlook for the industry
- Identify at least three trade associations that support the industry and what type of support they provide.
- Identify two leading companies in the industry and compare and contrast the two companies, including sales, number of employees, history, Forbes and Fortune ranking and current trends and issues.

The paper should have a minimum of 15 references, including five newspaper and magazine articles, three Internet sites, and the following resources: Hoover's Handbooks, Moody's Industrial Manual and Market Share Reporter.

possible to incorporate information literacy assignments and instruction into all courses, it is not, in all cases, appropriate or necessary. However, while it may not be appropriate to include an information literacy assignment in every course, neither is it appropriate to consistently avoid the inclusion of such an assignment in a course because it may require the course to change or evolve.

The third approach is to identify funds that can be used by faculty to purchase books and videotapes relevant to the courses being instructed. The purchase of these books and tapes create a situation where the student must go to the library and physically use identified resources to fulfill course requirements. Furthermore, by assigning funds or providing the faculty with an individual budget, the faculty becomes more involved in the collection and development of the library resources. This active involvement between the faculty and the library benefits the library, the faculty and the students.

The library benefits by collaborating with faculty to develop a more relevant collection to the research needs of the university's community. The faculty benefit by having a vested interest in developing the library's collection as well as becoming more knowledgeable of the library's collection, and the students benefit by having accurate, authoritative, and relevant information available in their library. Online research is but one component in developing information literacy skills. Contrary to popular belief, all relevant information is not available on the Internet or through Internet-based resources such as databases. Print material still plays an important role in the research process. Moving the student out of cyberspace and into the actual library is another critical aspect necessary to developing future business leaders.

Library research and instruction, now becoming more commonly referred to as information literacy skills and instruction, has long been recognized as an important component of the academic library and necessary for student success at the university level. "Academic librarians have a long and rich tradition of collaborating with discipline based faculty to advance the mission and goals of the library. Included in this tradition is the area of information literacy, a foundation skill for academic success and a key component of independent, life long learning" (Rockman, 2002). Librarians at the university level have always placed an emphasis on patron education; however, now that the Association of College and Research Libraries (ACRL) has identified and defined information literacy standards, librarians are becoming more rigorous in their attempts to implement these standards into the library instruction and into the curriculum as a whole.

The ACRL has defined information literacy and created standards and objectives for each standard. The ACRL defines information literacy as skills necessary to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (ACRL, 2001).

"Information Literacy forms the basis for life long learning. It is common to all disciplines, to all learning environments and to all levels of education. It enables learners to master content and extend their investigations, become more self directed and assume greater control over their own learning. An information literate individual is able to:

- Determine the extent of information needed

- Access the needed the information effectively and efficiently
- Evaluate information and its sources critically
- Incorporate selected information into ones 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” (ACRL, 2000).

The identification of life long learning as a university goal clearly indicates the importance of acquiring information literacy skills and the role the library plays in developing these skills across the curriculum. The acquisition of information literacy skills enable students to acquire, analyze and use information effectively, thereby enabling them to become life-long learners, adding value to their ability to succeed in the work environment.

University libraries have a myriad of excellent and authoritative resources available to their students, such as specialized subject encyclopedias, books, periodicals, and subject specific databases indexing and often providing full text to the periodical literature. Unfortunately, students are largely unaware of the various resources available to them through the university library; consequently, many students rely on solely on the Internet for their research needs. By failing to inform students of the availability of the resources and instructing them on how to use them effectively and efficiently, the university and the library demonstrate a deliberate indifference to the academic success of their students.

Considering the acceptance of the concept of life-long learning and the infusion of information literacy standards established by ACRL, the authors propose the adoption of a two-pillar approach to the information literacy initiative. Each pillar has two supporting tiers. The purpose of the two-pillar, two-tier approach is to ensure that no group of students are excluded, and consequently, unexposed to the library and the vast array of resources available to them through the library.

Pillar I: Undergraduate students.

Tier 1: University Preparation Course:

This course is designed to provide students with an overview of library services and to develop basic competencies on using library resources. All incoming freshman are required to take and pass this course.

Tier 2: Research Instruction Sessions:

Librarians and faculty collaborate to create an appropriate research assignment for the course. Instruction sessions are designed by librarians to assist students in completing a specific research assignment.

Pillar II: Graduate students

Tier 1: Research Methods Courses.

This course is designed to work create instruction session(s) which will enable graduate students to effectively and efficiently complete the research requirements of this course. All graduate students are required to take and pass the research methods course for their discipline.

Tier 2: Research Instruction Sessions

Librarians and faculty collaborate to create an appropriate research assignment for the course. Instruction sessions are designed by librarians to assist students complete a specific research assignment.

While the mission and instructional aims of the library are clearly defined, they do not limit the university in its development of the information literacy program. The library does invite the teaching faculty to contact the library, but the library is also proactive and aggressive in its outreach efforts. Librarians participate in numerous university committees, which keep the library staff informed of events affecting the university on a global perspective as well as enabling the library to assert the needs of the library. But most importantly, the library liaisons play a pivotal role in the library’s outreach efforts to faculty. Through the library liaisons, the library remains informed of the needs of the faculty on a departmental and individual level. Additionally, the library liaisons actively work with the faculty to create new assignments, have these assignments included in the syllabi, collect appropriate resources to meet the research needs of the faculty and their students and to provide research instruction to the students to assist them in completing these assignments.

Student success and retention of currently enrolled students are two of the most critical issues universities face. Research indicates that colleges increase their student success and retention rates when they are proactive and employ the use of strategies, such as orientations, freshman seminars, university preparation courses, and other similar programs (D'Angelo, 2003). At their core, these programs are designed to introduce students to the university experience and assist the students in successfully developing the myriad skills, such as information literacy skills, necessary for them to navigate the demands of higher education.

Colleges and university retention programs share many similarities, but institutions can, and do, take many different and innovative approaches to best prepare their students for the college experience. These programs often result in producing improved grades and retention rates.

There are many methods for measuring the success of the information literacy program. A review of the library literature conducted by O'Conner, Radcliff & Gedeon (2002) indicates that the library literature "does not contain or make reference to an instrument that is suitable for standardized, longitudinal, and cross institutional administered assessment. Since no one instrument exists for measuring information literacy skills, universities, colleges and libraries have developed their own assessment methods."

The library is constantly studying ways in which it can improve its services, including the effectiveness of information literacy programs. Currently, many libraries measure the extent and success of their information literacy programs by analyzing course syllabi for Library Instruction and Information Literacy assignments. This can be accomplished by tracking the number of requests for library instruction sessions and by distributing class evaluation surveys after each library instruction session. This survey provides feedback from the students on information presented, what they learned and allows the students to comment on the effectiveness of the librarian's instruction.

There is also a strong correlation between the increase of library traffic and reference transactions with the growth of an information literacy program. A study of library user statistics has shown that the information literacy program has produced a net increase in all areas of library use, such as the circulation of books, library traffic, use of items on reserve, interactions between students and librarians at the reference desk, and an increase in the use of the library's electronic resources.

Statistics are important to libraries because statistics are one way to measure and demonstrate library use. Therefore, librarians routinely monitor these statistics. "In many libraries, walk in reference traffic is down, while virtual traffic to the library's online resources is up" (Tenopir, 2003). Yet, since the inception of one library's information literacy program, a review of the reference statistics show an increase of interactions between the students and the librarians at the reference desk. In fact, since the Information Literacy program began, the amount of interactions has almost doubled (see Table 1.1).

The most important aspect of the library's information literacy program is the actual instruction to students, faculty and the university community on how to find appropriate authoritative information, effectively and efficiently. ACRL standards and objectives are major components of this instruction. Research and library instruction are required at the Tier 1 level of both of the library's instructional pillars, but it is the responsibility of the library liaisons to work with faculty to create appropriate research assignments for their courses and to promote library instruction at the Tier 2 level. The growth and acceptance of the information literacy by the university and the effectiveness of the relationships established between the librarian liaisons and their faculty have resulted in an increase in library instruction each year (see Table 1.2).

While the information literacy program has reflected positively on the amount of reference transactions, it has also benefited the use of the library's other resources, especially the use of the library's resources, specifically electronic databases. Each database vendor provides the library that subscribes to its services with usage statistics. Usually this is done on a monthly basis. With the information literacy program instructing students how to properly find authoritative information, the use of the library's electronic resources have steadily increased. In fact, the use has increased so dramatically that the library has successfully been able to lobby for an increase to its electronic resource budget to purchase subscriptions to new databases (see Table 1.3).

Table 1.1: **Reference Transactions:** Public Services Statistics FY 2001-2003

REFERENCES	June 2001 - May 2002	June 2002 - May 2003
Tutorials OPAC	173	277
Tutorials Index	127	238
Tutorials Internet	89	139
Videos	54	224
Reference Print	956	1299
Reference Electronic	1141	2300
Circulation Reserve	83	100
I.L.L	20	75
Research Campus	75	110
Research Phone	50	112
Research Email	6	55
Directional Q	236	687
Periodical / Fiche Retrieval	226	399
Syllabi	0	43
Other	0	265
TOTAL	3236	6323

Table 1.2: **Scheduled Classes for Library Instruction:** Public Services Statistics FY 2001-2003

Library Instruction	June 2001 - May 2002	June 2002 - May 2003
Scheduled Classes	73	87

Table 1.3: **Database Searches:** Public Services Statistics FY 2001-2003: Reference Department

Electronic Resources	FY 2001- 2002		FY 2002 - 2003	
	Usage searches	Usage Items Retrieved	Usage Searches	Usage Items Retrieved
Academic Search Premier	N/A	N/A	2341	5843
Academic Universe	3189	6246	2852	5432
Books in Print	N/A	N/A	77	495
Ebsco Online	3112	1324	498	432
Eric*E	40	40	211	193
Health Business Full Text Elite	N/A	N/A	663	2435
InfoTrac	28278	5406	35025	40151
JSTOR	1095	325	3141	2478
NetLibrary	530	530	393	341
Newsbank	138	99	1727	1751
OCLC First Search	4668	1534	4648	2294
Philosophers Index	180	1834	351	1837
Project Muse	382	323	858	426
Proquest	14077	20986	556895	27371
Sport's Discus	N/A	N/A	136	768
Ulrichs	N/A	N/A	319	2848
Total Database Usage	55689	38647	607339	85636

CONCLUSION

The authors have identified the correlation between the development of information literacy skills and professional success. Tomorrow's corporate leaders and change agents must develop business skills that uphold the value of information literacy, while creating opportunities to understand and evaluate the quality of information available today (Kuh & Gonyea, 2003). In that academia plays an important role in the development of business skills, the infusion of information literacy programs in all academic curriculums provides an environment where literacy information skills can be developed and tested to ensure information acquired for professional use is located and processed efficiently to make certain opportunities are not missed.

The article identified four approaches to implementing an information literacy program. These four approaches include (1) an information literacy mandate clearly stated through policy, (2) the creation of Librarian/Faculty liaison position(s), (3) funding for faculty to identify book/video purchases relevant to their areas of study to be used as a component of the information literacy program and (4) the adoption of a two-pillar approach to the information literacy initiative to ensure that no group of students are excluded, and consequently, unexposed to the library and the vast array of resources available to them through the library. Although it was not suggested these approaches were not necessarily the only methods of implementation, the authors note that when collaboratively employed, results identify a significant increase in information literacy usage and skill levels across curriculums.

Today's working professionals, in their effort to gain knowledge to enhance competitive advantage and personal marketability, have many academic options available to them. Universities offering business degrees often provide a spectrum of business specializations to more narrowly focus the area of study based upon professional needs. Academic preparation of corporate managers demands an infusion of information literacy programs across curriculums to develop student business skills that uphold the value of information literacy, while creating opportunities for students to understand and evaluate the quality of the sheer volume of available information (Kuh & Gonyea, 2003). Creating a mandatory library component in all course syllabi will have a positive impact on the business student's professional accomplishment. This article, and its supportive literature review, unquestionably identifies how this infusion of information literacy ensures both depth and breadth of student skill development.

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