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Carissa Holler

University of Illinois at Urbana-Champaign, [choller@uiuc.edu](mailto:choller@uiuc.edu)

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# INCORPORATING VENDOR-CREATED TRAINING INTO INFORMATION LITERACY INSTRUCTION

## A Case Study

Carissa M. Holler, MBA, MSLIS  
University of Illinois at Urbana-Champaign

### ABSTRACT

In Fall 2007, the library and the Department of Finance at the University of Illinois at Urbana-Champaign (UIUC) collaborated to offer a course that would not only assist students in achieving vendor-sponsored certification in the use of a fundamental financial resource, but would also enhance their educational experience by incorporating elements of information literacy instruction. This paper profiles the librarian-instructor's process of creating and conducting the course with the vendor's certification program embedded. Outcomes of the course, insights gained from the experience, and recommendations for other librarian-instructors are also discussed.

### INTRODUCTION

At the University of Illinois at Urbana-Champaign (UIUC), the library has a strong culture of information literacy, guided by faculty-level positions such as the Coordinator of Information Literacy Service and the Coordinator of Library Instruction. However, the Association of College and Research Libraries (ACRL)'s Information Literacy Competency Standards for Higher Education

(Association of College and Research Libraries, 2000), while certainly a part of the overall information literacy initiatives, are not pervasive in the initiatives of all library units. For example, the Business and Economics Library has provided instruction sessions at the request of faculty in the College of Business for many years. These sessions are not part of ongoing information literacy instruction initiatives and do not incorporate the ACRL standards. Rather, based on the needs of course instructors,

librarians typically conduct a single instruction session during the regularly scheduled lectures of a course, either as a portion of or the entirety of the content for a single lecture. In addition, instruction sessions are often conducted within the Business and Economics Library as small group demonstrations on resources that support course assignments and projects. As a faculty librarian within the Business and Economics Library, the author has conducted many such sessions, both within lectures and in the library, frequently presenting on one financial information resource in particular, the Bloomberg Professional Service.

The Bloomberg Professional Service is not typically considered a resource for academic use. Rather, the real-time pricing quotes and news feeds make the service more applicable for use in financial institutions. As Loomis, Burke, Neering, and Tkaczyk (2007) note, "There are 250,000 installations of this product around the world... On the floors of large financial institutions, there will usually be seas of Bloomborgs, used for trading, research, investment banking, arbitrage, you name it." Formal teaching in the use of the system is relatively rare in academic settings, in part because not all universities are able to support a subscription to the service. The author offers demonstrations and consultations on the system by appointment, but there has traditionally been no formal mechanism for introducing this resource to students.

In the Spring 2007 semester, the author was contacted by the Department of Finance within the College of Business to discuss a unique instruction opportunity: a standalone course incorporating the Bloomberg Professional Service and its associated certification program. Because existing literature contains little guidance, this case study provides an overview of the course and the developmental and instructional issues surrounding it, with the intention of providing insights and guidance for other librarian-instructors contemplating the use of vendor-created training within instruction sessions or courses.

## BACKGROUND

In their first paper on the "transition from the academy to the workplace as learning environments," (p. 570), Candy & Crebert (1991) specifically note the usefulness of experiential education in helping to bridge the contexts of university and workplace. Their suggestion to universities was to "expose learners to real or simulated situations from the workplace in the course of the normal curriculum" (p. 586). In a follow-up study (Crebert, Bates, Bell, Patrick, & Cragnolini, 2004), it was noted that in the intervening years, it had become more common for universities to offer "work-integrated learning programs" (p. 47) within the curricula of their degree programs. The rationale for this shift was in part supported by the findings of Harvey, Moon, and Geall (1997), as quoted by Crebert, Bates, Bell, Patrick, and Cragnolini, (2004, p. 54), that "the 'period of adjustment—the time it takes for a graduate to become effective in the workplace—is, increasingly, a cost that graduate employers are unable or unwilling to bear.'" This finding was further supported through focus-group discussions conducted by Crebert et al.

In the specialized case of the study of finance, universities have seemingly acted upon the findings and recommendations of these studies by incorporating financial information resources into their curricula to provide students with the opportunity to become familiar with resources they will use in their daily work lives. One of the most common actions taken is the creation of a "trading room," a computer laboratory designed to allow students to experience learning in a simulated, controlled trading environment with the related financial information systems. In 2006, Miller reported that "more than 60 business schools, both grad and undergrad, have built trading rooms" (p. 11). Several articles have profiled the operations of trading rooms and trading simulation programs (see Alexander, Heck, & McElreath, 2001; Cornell, 2002; Cummins, 1999; McEachern, 2000; Holowczak, 2005; Liu & Holowczak, 2000). In her survey of business

information literacy instruction practices, Cooney (2005) noted that a small number of librarians who responded to the survey reported offering instruction sessions within such trading rooms (p. 10), with no further elaboration. As noted in the literature, one of the resources commonly featured in such trading rooms is the Bloomberg Professional Service.

#### THE VENDOR-CREATED TRAINING PROGRAM

Concurrently with the development of many university-based trading rooms, the vendor-creator of the Bloomberg Professional Service, Bloomberg L.P., developed a classroom-based program on the use of the Bloomberg system. Successful completion of the program would result in acknowledgement of proficiency from the vendor in the form of certification. In early 2005, the vendor's traditional classroom-based certification program was introduced in a Web-based format as a series of instructional videos and examinations available through, and accessible to anyone with access to, the vendor's system (Holler, 2007). Under the current online certification program, an individual can become fully certified in the use of the resource by watching 13 instructional videos and successfully completing 13 corresponding examinations. The time commitment to achieve full certification varies by individual, but the activity of watching the videos alone would require a minimum commitment of slightly over seven hours (Holler, 2008). This does not include the additional time required to take the certification examinations.

Many universities with subscriptions to the Bloomberg Professional Service promote the certification program to their students as another experiential education mechanism like the trading room. At UIUC, the vendor's certification program is explicitly advertised to students in the Master of Science in Finance (MSF) program. Students from this program, as well as other graduate and undergraduate programs, pursue certification on their own initiative or when prompted by their instructors

or advisers. Certification is viewed by the students as a means to gain proficiency (and receive acknowledgement for it) in using a system that they would otherwise first experience in a workplace context, and to do so without the anxiety that comes with learning the new job itself. In a university setting, the student not only has relative leisure in learning how to use the system and pursuing certification, but also has the support of instructors and/or library faculty. At UIUC, the Business and Economics Library hosts three dedicated terminals to access the system; maintains instructional binders to guide students in beginning the certification process; provides an online sign-up form for students to reserve time on the system; and provides the assistance of a librarian who has achieved full certification under the program to help the students with any questions or issues.

#### PLOTTING A COURSE

In the Spring 2007 semester, the Department of Finance requested that the library offer a course in financial information systems, focused on the vendor's certification program but also incorporating other resources and skill development practices. The rationale was that although finance students reported a strong desire to pursue certification, observations suggested that only a fraction of those who expressed interest ever began the certification program, and only a fraction of that group went on to complete it. The intention in creating the course was to provide some structure and guidance in the certification process in order to keep interested students on track to complete certification, while at the same time providing some context and connection to their educational experience—an element that is absent in the content of the vendor's certification program. The author was asked to create and conduct the course.

Through discussions between the chair of the Department of Finance, the head of the Business and Economics Library, and the author, four goals for the course were established. First, since it was anticipated to be the primary incentive for many students, the vendor's

certification program was to be a central part of the course, and all students should achieve vendor certification by the end. As noted in the ACRL standards, “Information literacy, while showing significant overlap with information technology skills, is a distinct and broader area of competence. Increasingly, information technology skills are interwoven with, and support, information literacy” (p. 3). Proficiency in technology and its applications is only one of many conditions for information literacy. The vendor’s certification program does not instill information literacy in its users, but simply seeks to help them achieve the ability to navigate the system and retrieve information relevant to the search at hand. Therefore, while the vendor’s certification program represents an unrivaled effort to produce proficient users of the system, it is not, on its own, sufficient to produce information-literate users, nor is that its intent.

The opportunity for information literacy instruction was presented in the second agreed-upon goal: the course was to provide exposure for the Business and Economics Library and its financial information resources. This would allow the instructor to expand the content of the course beyond discussions of the vendor’s certification program and include alternative (and occasionally competing) financial information resources in the course. Although this goal was not created with the ACRL standards in mind, it would position the students to meet ACRL Standard One, Performance Indicator 2: “The information literate student identifies a variety of types and formats of potential sources for information” (p. 8). The instruction would also enable students to “select the most appropriate investigative methods or information retrieval systems for accessing the needed information” (p. 9) and “retrieve information online or in person using a variety of methods” (p. 10) in accordance with ACRL Standard Two, Performance Indicators 1 and 3, respectively.

The third and fourth goals addressed aspects of the students’ skill development, and also incorporated elements of the ACRL standards. It

was decided that the students should gain experience working collaboratively in teams, and that they should be given a mechanism to develop their communication and presentation skills. Through these goals the students would develop skills related to ACRL Standard Four, which states, “The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose” (p. 13), and also to its related Performance Indicator 3, which states, “The information literate student communicates the product or performance effectively to others” (p. 13).

These discussions between the Department of Finance and the library also established the arrangement of the course, including such elements as duration (eight weeks, or a half semester), first offering (the beginning of the Fall 2007 semester), and name (FIN 580 BEL—Financial Information Systems, a “special topics” course). The course was restricted to students in either the first or second year of the Master of Business Administration and Master of Science in Finance programs, with a limited enrollment of 24 students. Grading for the course would be on a satisfactory/unsatisfactory basis, earning the students credit toward graduation but with no impact on their grade point averages. As noted by Cooney (2005), only 4% of librarians responding to the study’s survey reported providing business instruction in for-credit courses (p. 11), which marks the FIN 580 BEL course as an unusual opportunity.

Since the certification videos are available only through the terminals dedicated to the Bloomberg product, it would be necessary for students to spend at least part of their class time in the Business and Economics Library. This led to the consensus that a blended format, which has been explained as the “thoughtful integration of classroom face-to-face learning experiences with online learning experiences” (Garrison & Kanuka, 2004, p. 96) would be an appropriate approach. Out of two lecture sessions each week, it was determined that one 80-minute lecture would be conducted by the instructor at a regularly scheduled day

and time. The second “lecture” of each week would be arranged by the students themselves on times and days compatible with their schedules, and would require them to watch the assigned certification videos for the week in the Business and Economics Library. This model is reminiscent of the one presented by Sharkey (2006), in that instructional modules were to be integrated into the course sessions and were “assigned in conjunction with the various lecture topics and in-class activities” (p. 78). Unlike Sharkey’s model, in this case the sequence of topics in the certification videos would dictate the content to be covered by the instructor in the weekly lectures.

#### DEVELOPMENT AND IMPLEMENTATION OF THE COURSE

There is little discussion in the existing literature regarding the use of vendor-created training in instruction sessions, with the exception of legal resources. Nevers (2007) provides an overview of existing literature on this topic and presents the argument that law librarians, rather than database vendors, should be responsible for presenting introductory sessions on legal research databases, particularly to first-year law students. Among the reasons given include the perspective that law librarians can provide, particularly for evaluation of resources, by speaking not only to the advantages and disadvantages of different online legal research systems, but also to the advantages and disadvantages of print versus online resources in different circumstances.

In any circumstance, there will almost certainly be a disconnect between what a vendor wants users to know about its product and what an instructor wants students to know about the product and how it compares to other products. For the instructor in this case, familiarity with the vendor’s certification program was instrumental in understanding the topics covered by the certification videos, so that they could be supplemented with additional content in the lectures and developed into broader information literacy instruction.

The quality, coverage and content, and intended audiences of the vendor’s program were all considered in determining how to build the course. In previous publications, the author has outlined some of the problems inherent in the delivery of this particular certification program (Holler, 2007; Holler, 2008) which might be present in other vendor-created training programs. For example, the age of the instructional videos could be an issue: At the time of the FIN 580 BEL course, the vendor’s instructional videos were over a year old, and disparities between the existing interfaces in the system (which had been revised since filming) and the interfaces in the videos confused the students. Also, certain features discussed in the vendor-created training may be unavailable to academic institutions. Most noteworthy of all in this case, the vendor’s training videos are designed for working professionals who use the financial information system in their work. Therefore, the content is likely beyond the experiences and needs of most of the students. Awareness of issues such as these surrounding a vendor’s training or instruction program is vital in the development and successful implementation of a course based on such a program.

Bearing these factors in mind, each lecture by the instructor was constructed to include an overview of the topics and concepts that would be covered in the vendor’s certification videos assigned for the upcoming week, introducing additional financial information resources relating to the topics of the week when applicable. The instructor established the sequence of videos by identifying similar topics and then grouping those videos together (the vendor does not dictate a sequence in which the certification videos should be viewed). Two or three videos were assigned each week for the first seven weeks of the course, which represented 13 required videos and two elective videos. The final session of the course was reserved for student presentations.

In the first lecture, the instructor outlined the parameters of the course and emphasized her lack of affiliation with the vendor or its

certification program, to prepare the students to detect potential bias in the vendor's training compared to the instructor's relative impartiality in discussing resources. In this and other lectures, the instructor used annotated screen shots captured from the vendor's system to highlight the features that the instructor wished to emphasize. The screen shots allowed the instructor to clearly explain which of the functions covered in the videos might be useful to students and which might be more applicable for the professional audience targeted by the videos. The annotations were also useful in drawing students' attention to parts of the system that the vendor's trainer may have ignored or glossed over, but which had value in teaching the students to be educated searchers. For example, the system offers substantial supporting documentation, which enabled the students to retrieve definitions of concepts and functions; details of calculations that the system can perform; and the names of data providers. This latter point emphasized the fact that the vendor's system in this case is an aggregator of data rather than a direct producer, a distinction that might have been new to the students. Each week, the lecture presentations were made available to the students to download and study after class as needed.

Other financial information resources highlighted in the course included subscription resources available through the library, such as OneSource, LexisNexis Academic Universe, Mergent, and Thomson Datastream, as well as free Web-based resources such as Yahoo Finance, Marketwatch.com, and EDGAR. These resources were selected based on their compatibility with the topics covered in the vendor's training videos. The most obvious advantage of these resources (which the students identified immediately) is that while these databases may lack Bloomberg's depth, they make up for it by offering familiar interfaces and navigation, broader accessibility from many locations, and relative ease in retrieving and downloading data. Less obvious but perhaps even more important for the students was the realization that many of the content providers for the vendor's system are also content

providers for some of the more easily accessed resources. One example is the government-sponsored website EDGAR, which is acknowledged as the most authoritative source of company filings and provides those filings to anyone, including vendors, because the documents are made freely available through the Web.

The homework assignments asked the students to study the content of the many resources covered in the course. The questions were all presented in multiple-choice format, to complement the format of the certification examinations required by the vendor's program. Questions such as "What resource can give you a 10-K filing?" and "Which of the following resources will \*NOT\* provide you with a calculated figure for 'beta' for large, public, U. S. companies?" asked the students to explore and evaluate the options provided to identify the correct resources. Questions such as "Who provides the corporate governance measure in Yahoo Finance's company profiles?" asked the students to identify the provider of the content and, based on the wording of the response options, come to a realization that this is the same content provider for certain fee-based systems.

The final assignment of the course, in recognition of the course goals, was a group presentation. With most of the students newly certified in the use of the Bloomberg system, each group was asked to select a large, U. S.-based public company and identify five functions in the system that the students felt best illustrated the company's current condition and status. The students were asked to be creative in selecting the functions, and even encouraged to select functions not covered in the course lectures or the vendor's training videos. For each function, the group was asked to explain what the function does and why it was deemed applicable to the company, through the use of screen shots, definitions, and video or lecture content. The groups were also asked to provide a demonstration of each function to put the company in context, taking multiple screen shots to illustrate what each function revealed

about the company under different parameters and assumptions.

#### USING VENDOR-CREATED TRAINING TO EMPHASIZE THE ACRL STANDARDS

As might be expected, not all of the ACRL standards are equally addressed or facilitated through the use of vendor-created training. At the most basic level, the vendor's training videos in this case helped demonstrate the concepts of the ACRL standards not so much by the material itself, but by the ways in which the trainers presented it.

Considering Standard One, or the "know" standard (ACRL, p. 7-9), it is beneficial to frame the vendor's trainers as experts in the use of the vendor's products, which makes them very efficient in presenting key functions and features to appeal to the audiences that they wish to reach. In this case, students were able to determine the purpose and audience of the resource based on the way the trainer presented it and highlighted its features. In other words, the videos helped the students to understand clearly who the audience is for the resource and for the training videos, which gave them an invaluable perspective on the potential uses of the information contained in the system. Further, in viewing these training videos, the students received the vendor's own description of how information is "produced, organized, and disseminated" within the system, which made them better able to determine whether this was an appropriate resource for their needs.

For Standard Two, or the "access" standard (ACRL, p. 9-11), the experts in the videos helped bring authority to the process of teaching students how to access information in the system. The students could then contrast the complexity of accessing information in the system against the relatively less complex and usually much more intuitive Web-based resources. The videos also demonstrated how data could be downloaded from the system and then incorporated into spreadsheet applications. These are features the library's subscription does not include; the videos made students

aware of this capability within the system and also provided a basis for determining whether the system's access issues rendered it unusable for the research at hand.

For Standard Three, or the "evaluate" standard (ACRL, p. 11-13), the videos challenged the students to consider "reliability, validity, accuracy, authority, timeliness, and point of view or bias." Clearly, bias in particular needed to be considered, since the focus of the videos was on the strengths of the system to the exclusion of any competing resources. These considerations led students to question "the source of the data" and "the limitations of the information gathering tools" (ACRL, p. 12). In addition, the videos made it possible for the students to more clearly understand the "context within which the information was created" (ACRL, p. 11) to facilitate interpretation of the information.

Through demonstrations presented in the videos, students received guidance in manipulating "digital text, image, and data, as needed, transferring them from their original locations and formats to a new context," in accordance with Standard Four (the "use" standard) (ACRL, p. 13). Since students were required to watch the videos while seated at Bloomberg terminals, the videos enabled individual hands-on instruction for each student that the instructor would not have had time to provide. The combination of lectures by the instructor and training from the vendor representatives in the videos provided two distinct examples of how to gather and present information retrieved from the system. In particular, the students could see the importance of communicating "clearly and with a style that supports the purposes of the intended audience" (ACRL, p. 13), after weeks of lectures for which they were the primary audience interspersed with videos for which they clearly were not the intended audience.

In relation to Standard Five, the "ethics" standard, the videos helped students better understand "issues related to free vs. fee-based access to information" (ACRL, p. 14). While the videos did not explicitly mention dollar



amounts, comments about additional content being available for purchase, with fees to be negotiated and contracts to be signed, helped students understand the complexity of fee-based resources and appreciate the flexibility and convenience of other resources.

#### OUTCOMES OF THE COURSE

The primary goal—that all students would be fully certified through the vendor's program by the end of the eight-week course—was not met. However, most of the students were able to achieve that goal, with the remaining students working independently after the end of the course to complete certification. Despite the students' success in achieving certification, it seems very unlikely that much of the training will be retained unless use of the Bloomberg Professional Service is made a requirement in their coursework. Otherwise, the students' immediate research needs for their homework projects can be, and frequently appear to be, met with the other resources covered in the course lectures, as they are generally more accessible and easier to navigate.

Students became familiar with financial information resources available through the library, including the availability of assistance through consultation with librarians such as the instructor. This addressed the second goal and, correspondingly, certain ACRL Standards and Performance Indicators (specifically, Performance Indicator 2 for Standard One (p. 8) and Performance Indicators 1 (p. 9) and 3 (p. 10) for Standard Two). Weekly lectures not only covered the topics that would be presented in the vendor's certification videos, but also introduced other relevant financial information resources, thereby enabling students to compare and evaluate the available resources and determine which ones might best meet their needs.

Attempts to encourage the students to work in groups were only partially successful, so this goal and the group-work portions of ACRL Standard Four (p. 13) were not entirely met. While students were encouraged to work

collaboratively on homework assignments (although it was made clear that collaboration on the certification examinations would not be tolerated), it seemed that most students preferred to complete and submit the homework assignments on their own. In addition, specialized equipment bought for the course enabled several students to watch certification videos at the same time through the vendor's system. While a few groups of students initially embraced this opportunity, ultimately they found that the benefits did not outweigh the difficulties of coordinating a time to watch the videos with their colleagues each week.

Finally, the group presentations in the final class session met the fourth goal and, correspondingly, addressed ACRL Standard Four in general and its Performance Indicator 3 (p. 13) in particular. The presentations were beneficial in that students were able to discuss financial concepts with the class and demonstrate their learning on the vendor's system. However, the variety of functions featured was somewhat lacking, and was limited to functions covered in the certification videos. Therefore, few of the groups demonstrated an interest in applying and adapting the proficiency gained in the course to explore new areas of the vendor's system and educate their classmates about them.

Despite the mixed success, the students' course evaluations were overwhelmingly positive. One student even suggested that the course be made mandatory for MBA students concentrating on finance in the final semester of their program. Based on these responses, the Department of Finance expressed an interest in offering the course again.

The outcomes of the initial course offering suggest consideration of a few changes for any future offerings. First and foremost, a more concerted incorporation of the ACRL standards would give more structure to the course, and might facilitate students' acquisition of lifelong skills. A longer course would allow the pace of the certification program to be slowed; with fewer training videos to watch each week, there

would be time to cover additional financial information resources and information literacy skills in more depth. The information fluency model outlined in Sharkey's (2006) case study would provide insights here. Also, the collaborative intent of the course, specifically the goals of promoting teamwork and communication among the students, would be better achieved by requiring attendance at the weekly lectures. Finally, the course would benefit from hands-on instruction during the lectures, as opposed to a pure lecture format. As the College of Business nears completion of its version of a trading room, hands-on instruction may soon become feasible.

## CONCLUSIONS

Constructing a credit-bearing course around vendor-created training presented both challenges and opportunities. From the instructor's perspective, key factors in making the course possible were support and direction from both the sponsoring department and the library, an awareness of students' motivations for taking the course, and an in-depth knowledge of the content in the vendor's training program.

The vendor representatives who appear in the videos were unwitting co-instructors in this course. In any co-instruction arrangement, students benefit from comparing and contrasting the knowledge, experience, and styles of the instructors. In the unique case of vendor-created training, the trainers are expected to address the specific content and functionality of the resource they represent, providing an expert or "insider" perspective. The vendor's trainers, from their expert status, are able to explain some of the resource's capabilities better perhaps than the instructor could, and are able to group features and functions into topic areas to provide a better perspective of how the vendor intends for the resource to be used. From their "insider" perspective, the trainers are able to access areas that may be outside of the institution's subscription and therefore can present more complete picture of the resource's capabilities.

This frees the instructor of the course to focus on areas that the vendor's training cannot (and would not): namely, presenting an objective evaluation of the resource and encouraging comparison to other resources, as a part of information literacy instruction. This interplay of vendor training and instructor lectures can arguably provide a more lasting impression than the instructor's lectures alone, because of the opportunities for the students to compare and contrast the information they receive about the resources.

Finally, by receiving training from someone who is not affiliated with their own institution, students may begin to see the importance of information-gathering and research after graduation, beyond the requirements of homework assignments. In this case in particular, the vendor's training program is intended for working professionals in the field, and viewing the training videos provided the students with a glimpse of the expectations for information-gathering skills in the workplace. This further reinforces the students' growing understanding that knowing, accessing, evaluating, and using information resources are truly lifelong skills.

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