

Editorial

Guest Editorial

By Hema Ramachandran and Erin Lanham

This issue of *Education Libraries*, which is dedicated to the ongoing, timely, and important topic of information literacy in the workplace, showcases presentations from two sessions sponsored by the Education and Engineering Divisions at the 2010 SLA Annual Conference in New Orleans

<http://www.sla.org/content/events/confpresentations/2010.cfm>. The first part of the program provided an overview of the issues from key researchers in the field; the second part was a panel of academic and corporate engineering librarians discussing the challenges they face in imparting information literacy.

At our suggestion, the Editor graciously agreed to dedicate this issue of the journal to this topic – a topic that is important for all of us who are in the information business.

In *Information Literacy in the Workplace Part 1*, Dr. Sharon Weiner, Professor of Library Science and the W. Wayne Booker Endowed Chair in Information Literacy for Purdue Libraries, Laura Leavitt, Labor and Industrial Relations Librarian at the Business Library, Michigan State University, and Tiffini Travis, Director of Information Literacy & Outreach Services at California State University, Long Beach presented and discussed their research and experiences on preparing students to become information-literate workers.

Dr. Weiner provided the background to workplace information literacy with a discussion of current research, barriers including social aspects and the idea of “workforce readiness.” Laura Leavitt asked whether Information Literacy (IL) skills taught in Academia are transferable to the workplace in a meaningful manner. She describes her experience with a graduate level labor and

industrial relations course and the lessons learned. Tiffini Travis reported on the results of a survey she conducted on alumni of the California State University system and their use of information literacy skills in the workplace. Weiner, Leavitt and Travis have published their findings and their conference presentations in this issue.

In Part 2 of the program, the moderator posed the following questions to a panel of academic and corporate librarians in engineering:

- Are academic engineering librarians teaching appropriate skills and how do they know they are reaching their goal?
- What skills in terms of information literacy do new engineering graduates have to have as they enter the workforce?
- Do corporate librarians find that new workers have the appropriate information seeking skills or do they lack them?
- If new engineers are lacking IL skills, how can we bridge the gap?

What follows in this editorial is a brief summary of their presentations.

Jay Bhatt, Engineering Librarian, Drexel University, described their extensive IL program for engineering students in both the undergraduate and graduate programs, addressing the idea of “information awareness” as a precondition. Jay conducted a quick informal survey of his alumni which produced some interesting and thought-provoking comments. A sample of the comments is summarized below:

- Undergraduates need a refresher in research skills when they arrive in their first job
- Many comments centered on the lack of needed materials in their company especially journals and databases. (This is probably true of small to medium sized companies but not in the case of big companies such as Boeing)

- Corporate librarians should consult their new hires and find out what their information needs are, and whether they have access to the resources they need.
- Collaboration between academic and corporate librarians to share information literacy instruction is a good idea
- Companies could be provided with access to academic libraries with a fee associated with it. So that training employees on information literacy could be held on campus
- Most graduate students, especially PhDs, get well versed with research based search skills by the time they get ready for graduation, based on the teachings by their respective academic librarians

Jay makes a good point that we teach students information skills, they graduate, and due to contractual reasons we cut them off from our resources! Many of the alumni end up in small to medium companies which do not have the resources to which they have become accustomed. Perhaps there should be a way that vendors can allow us to give our alumni access for a couple of years so that they can demonstrate to their companies the importance of these resources? (Maybe the vendors will end up with more customers, too).

Joy McNally, Technical Services Librarian at FM Global (an international property insurance company with a focus on loss prevention engineering based in Norwood, MA), talked about how they are planning to implement a new instructional program for their interns in the near future. As a follow-up to departmental surveys, the Technical Information Center, interviewed engineers and scientists from the Engineering and Research Division about their information literacy and research skills.

Managers and intern mentors were asked what research skills interns and recent graduates needed to have, and whether or not applicants had these skills, while recent hires with bachelor's, master's and PhD degrees were asked a series of questions about what course work best prepared them for

their current position, and what skills they developed on the job but wish they had learned in school. Of the ten new hires, only two had a library session or component in their university experience and in both cases it was at the beginning of their undergraduate studies and focused on using databases and library resources and did not include critical thinking skills or research methodology. This is unfortunate, since new graduates need to be able to clearly defend their methodology and results since their conclusions lead to decisions that have long-term consequences. This is reflected in the views of the mentors and managers who expressed concerns that new hires lack the skills to assess the sources or the type of information they find and then develop recommendations based on their research.

Susan K. Smith, Head of the Shaver Engineering Library at the University of Kentucky (UK), has a unique vantage point having worked for many years as a corporate librarian in engineering companies before becoming an academic librarian. Susan's presentation highlighted the challenges faced by many engineering librarians on large campuses: large class size (50-100 students), lecture style instruction which prevents the inclusion of active learning components, students' inability to perceive the need for research skills, challenges of teaching first generation students and gender issues. Nevertheless, Susan has made inroads by collaborating with some faculty, developing learning outcomes, rubrics and research assignments that count towards students' final grades. At UK, some upper level classes are required to write a research paper. This group receives a session on research methodology with an active learning component in a computer classroom and each student is required to have a one-on-one consultation with the librarian. Lower level classes break into small teams to utilize exploratory techniques in literature searching during instruction sessions. Susan knows first-hand the types of skills needed by working engineers. For instance, she can attest to the importance not only of research skills but also the importance of strong written and communication skills.

Our final panelist was Diane Brenes (presenting on behalf of Joan Dubis) of the Boeing Company. Boeing Library Services team has offices in various locations throughout the country and a book repository in California for circulating the collection. One of the challenges addressed in the presentation was educating employees on the “information-rich” environment at Boeing. They offer access to many externally subscribed databases as well as internally-produced technically-rich documents and collections. In fact, the Boeing Library Services team (of which Diane and Joan are members) won the SLA JJ Keller Innovations in Technology Award in 2009 for their project which connects the various communities and departments at Boeing through shared content. They accomplished this through the use of departmental collections within Boeing's catalog and internal Gateway web pages. Diane pointed out that it is often the student interns who seek out their corporate library and thereby become “lifelong” patrons referring co-workers to Boeing's rich information resources. Academic librarians should ensure that graduating engineering students are instructed to seek out their corporate librarian (if there is one). In order to accomplish this joint goal, corporate and academic librarians need to collaborate so that students who have started on the road to lifelong learning continue their journey with the assistance of their corporate librarian. In fact, “lifelong learning” is one of the criteria against which engineering programs in the US are evaluated as part of the ABET Accreditation process. Please access the section on “Criteria for Accrediting Engineering Programs” at <http://abet.org/forms.shtml>. Criteria 3i is “a recognition of the need for, and an ability to engage in life-long learning.” Information literacy provides us an essential set of tools to engage in lifelong learning.

There was spirited discussion between the presenters and the audience after Part 2. We highlight here two interesting issues that were raised in the discussions. Due to time constraints, Joy McNally was only able to briefly touch on the issue of Copyright, but it was clear from comments that corporate librarians feel that

students are not taught adequately about copyright or more precisely issues around intellectual property in their academic programs.

A corporate librarian in the audience made the following general point: academic librarians should discuss the cost of information to their graduating engineers. Students have become accustomed to the ease with which they can get journal articles, conference papers and other materials delivered to their desktop (the IEEE Xplore would be a case-in-point) and when they enter the workplace they do not understand the costs involved in obtaining needed information.

Conclusion

It would seem from the presentations and ensuing discussions in the packed rooms at both sessions that we need to continue our discussions about workplace information literacy and that it is imperative for academic and corporate librarians to collaborate on teaching appropriate information seeking skills. Venues such as the SLA Annual Conference, which brings both corporate and academic librarians under one roof is a good place to start - our hope is that our sessions were the first small steps in beginning and continuing such a dialog.

We were honored that we had very strong vendor support for both programs. HW Wilson and the Association of Computing Machinery (ACM) supported Part 1. Knovel, a major vendor for technical information and data in engineering, recognizing the significance of this topic was the sole sponsor for Part 2 of our program. Ross Graber, Director of Marketing, of Knovel, launched Part 2 with a brief introduction stressing the importance of the topic.

Here are some thoughts on the way forward:

- Librarians can raise awareness on the importance of IL by including it in workers' professional development, working with professional organizations, and building recognition programs that will promote innovation.
- Librarians can work with colleagues, both within and outside the library, to develop

best practices and toolkits for teaching and assessing workplace IL

- Academic librarians should conduct surveys of companies and organizations that hire their students, and make contact with the librarians (if the company has one) and vice versa
- Corporate and academic libraries should make more of an effort to reach out to their counterparts locally/regionally and discuss common issues
- Academic institutions need to conduct research on whether their information literacy programs benefitted their alumni and contributed to their pursuit of lifelong learning

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