Evidence Based Library and Information Practice

University Engineering Faculty Depend on Scholarly Journals, Web Resources, and Face-to-Face Consultations to Help Them with Research

A Review of:
Engel, D., Robbins, S., & Kulp, C. (2011). The information-seeking habits of engineering faculty. *College & Research Libraries, 72*(6), 548-567.

Reviewed by:
Laura Newton Miller
Science and Engineering Reference Librarian
Carleton University
Ottawa, Ontario, Canada
Email: laura_newtonmiller@carleton.ca

Abstract

Objective – To study the information-seeking behaviour of engineering faculty.

Design – Online survey; Purposive sample.

Setting – Engineering departments of 20 large public universities in various regions of the United States.

Subjects – 903 engineering faculty members (including 35% professors; 24% associate professors, 23% assistant professors, and 17% ranked as adjunct faculty, instructors, lecturers, professors emeriti and "other").

Methods – 4905 researchers were sent an email invitation to complete a 12-item survey with open and closed questions. Email addresses were gathered from university websites.

Main Results – 96% of those surveyed find access to online scholarly journals (current and backfiles) as very important or important. 71% believe access to the physical book collection is very important or important. 56% feel that access to electronic book collections is very important or important. (Further analysis revealed a difference between newer and older faculty- 62% of newer faculty and 52% of faculty in field for 16 or more years think electronic book collections are important). Print subscriptions to journals are important to only 37% of respondents, and providing space to conduct research is important to only 36% of those surveyed. Besides attending conferences and scanning journals, face-to-face discussion

with students and colleagues was a key resource for faculty for keeping current in the engineering field. 81% seek information at least weekly to prepare for lectures, about 74% at least monthly to conduct research or write publications, and 77% at least monthly to remain current in their field. 73% visited the physical library fewer than five times in the past year, but researchers were surprised that almost half (47%) rated assistance from library staff as important or very important. 70% see interlibrary loan services as important or very important.

Conclusion – Engineering faculty rely on scholarly journals, Internet, and other electronic resources for their research. They depend on face-to-face consultations with students and colleagues. The physical space of the library is less important.

Commentary

Research papers studying engineers usually focus on them as practitioners, as a comparison to scientists, or as a comparison between practitioners and faculty. This study focuses completely on the engineering faculty member's information needs in a large university setting.

Using the EBLIP Critical Appraisal Checklist, it was determined that a survey was an appropriate tool for this kind of research and there was face validity in the study design. The methods were clearly explained and the survey was included at the end of the paper, making it easily replicable for further study.

A response rate of 18% is a little low (903 responses out of 4905 invitations). Having a purposive sample of only large research institutions makes one wonder if results might have been different with a bigger response rate that included smaller institutions. A definition of "large" would have been beneficial for readers, and it would be interesting to discover if needs differ between faculty of smaller and larger universities. A description of trends by geographic area would have been useful. It is also unclear if more respondents were from

one university than another. How evenly distributed were the results among institutions? Could this have affected results?

Emails taken from institutional websites can sometimes be quite out-of-date. Contacting administrators from engineering departments to forward the survey to faculty may have yielded results from a more up-to-date list. Perhaps faculty may be more likely to respond to a survey sent from someone they know, as opposed to an email that may have gone straight to their junk folder.

The results confirm findings from other studies that engineers rely heavily on online resources for their information needs. It was interesting to see that 71% of respondents feel the physical book collection is either important or very important, yet very few actually visit the physical library. Faculty loan periods can vary among institutions, so perhaps they are coming in fewer times because of longer loan periods with online renewal options. Depending on interlibrary loan options, it is possible that books are being delivered straight to their offices, negating the need to visit the physical library. There seems to be a difference between younger and older faculty's views on e-books. Future studies regarding how engineers use e-books, and whether there are differences between how various formats are used for everyday work needs will be important for librarians in understanding this user group.

Librarians face difficult financial decisions when purchasing resources in a variety of formats with shrinking budgets. This study reinforces the fact that engineering librarians need to figure out ways to stay relevant when dealing with patrons who rarely visit the physical library. Providing online resources at point-of-need is one way to do that. This paper helps engineering librarians to better understand their faculty by knowing electronic access to journal articles, monographs and other online sources are important in research and teaching.

References

Glynn, L. (2006). A critical appraisal tool for
library and information research.
Library Hi Tech, 24(3), 387-399.
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