Evidence Based Library and Information Practice

Mining E-mail to Improve Information Literacy Instruction

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Setting

Mount Royal University (MRU) is an undergraduate institution with an enrollment of 8,000 FTE, located in Calgary, Alberta, Canada. The Library provides a range of course and program-integrated instruction in information literacy (IL) conducted by liaison librarians in collaboration with faculty in the disciplines. The Faculty of Communication Studies currently serves students in three degree programs, the Bachelor of Communication in Journalism, Public Relations, or Information Design, and a Diploma program in Broadcasting.

The liaison librarian works with students in all Communication programs, both in the development and provision of IL classes, and in the provision of one-to-one assistance through appointments, e-mail, and regular reference hours at both the main library information desk and in the Centre for Communications learning space. There are IL classes in most first-year courses, and increasingly specialized sessions in later years that focus on particular resources, course content and higher-level concepts in information literacy. The librarian is known by the students to be somewhat compulsive about answering e-mails, and often responds during evenings and weekends.

Problem

While there was no defined problem with the services being provided, the librarian was curious about the amount and type of e-mail questions students were asking. Patterns within the types of questions being asked, the programs, levels, courses or assignments that were generating the questions, or the individuals asking the questions might reveal areas where IL might be improved to better meet student needs. The librarian was also interested in the time of day students asked questions as an indication of when students were working on their assignments.

Evidence

In consultation with members of MRU's Human Research Ethics Board, the author determined that unless consent was obtained from those students who e-mailed the librarian, no data could be published. As seeking such consent might unduly constrain students from contacting the librarian, and might therefore be detrimental to their studies, consent was not sought. Therefore, while the process of the study can be described as an encouragement to other librarians to mine this rich supply of data, I cannot share the results.

Beginning in August of 2008, the librarian collected e-mail from students and placed it in a folder. Excluded were e-mails that were required, such as assignments that were e-mailed to the librarian, and, for the first part of the year, communications through Facebook. These last messages were routinely deleted by the librarian, until it became evident how many of them were reference questions. In July 2009, the librarian extracted the file of student e-mails into a spreadsheet and coded it by type, such as search strategy help, citation questions, requests for appointments, and help with statistics. She also recorded data about what might have triggered the questions, including the program, year of study, and, where determinable, course and assignment. This was possible due to the librarian's knowledge of the curriculum and of the students. Information on the time and date that questions were sent was also part of the data. Coding a year's worth of questions (n=543) took approximately eight hours.

The results regarding the type and timing of questions would not have surprised any academic librarian. In fact, results were similar to larger scale studies carried out to evaluate e-mail and chat reference services (Lee, 2004; Leykam & Perkins, 2008; Rourke & Lupien, 2007). There were interesting patterns in the levels, courses and assignments that generated questions. For example, there was a significant lack of questions from students in the second year of any Communications program. This could have been read a number of ways: the

students had learned everything they needed to in the first year (optimistic but unlikely); the students had no significant research assignments (on investigation, not the case); or the students, who did not meet with the librarian in as many courses in the second year, forgot about this resource (sadly, the most probable cause). In investigating the assignments required in the second year, the librarian ascertained that these had not prompted in-person consultations either.

Assessing students' needs by examining only one form of interaction is problematic. There may be students who are not comfortable using e-mail, some preferring to phone or meet face-to-face. Some may be getting all the help they need at the information desk, where only very broad statistics are kept, or from their peers and instructors. A study like this can only be used to measure one aspect of interaction with users, and should be used in concert with other assessments to see the whole picture of who is or is not requesting help, and what kind of help they are requesting.

Quite apart from evidence about the kinds of questions students were asking, the study provided data about the librarian's work activities, including how significant an aspect of teaching the e-mail communication represented.

Implementation

In the 2009-10 academic year, a number of changes were made to IL delivery based on the evidence of the e-mails. The content of some sessions was updated and clarified in response to common areas of difficulty.

In response to the problem of "missing" second-year students, the librarian asked for 15 minutes in the main second-year class of the degree disciplines, Information Design, Journalism, and Public Relations, at the beginning of the Fall semester of 2009. She used this time to review key materials students might use for assignments, to highlight new resources and changes to the

library website, and mostly to remind the students that they could ask for assistance. In each of these "promotional" talks, the librarian spoke directly of the evidence from e-mails as the reason for the session. There was generally a brief period for questions and answers.

Information from the study also contributed to a better understanding and a better balancing of the librarian's workload. In part because of data from the study, the librarian reduced the number of shifts at the main reference desk and added regular weekly reference hours in the Centre for Communication studies, where many of the students do their work.

Outcome

While the full impact of implementing the changes will only be evident after reviewing the current year's student e-mails, there has been some noticeable effect. Students apparently found the promotional talks in the second-year courses helpful, and instructors certainly did. As a result of discussions with faculty about the "missing" second-year students, several faculty members have booked longer sessions on particular aspects of information resources, or specific skills such as using statistics, required by assignments in these courses.

Reflection

The study has been very successful as a means of satisfying the librarian's curiosity about an aspect of her work. It was relatively easy and efficient to carry out, requiring comparatively little time to develop rich results. These results provide evidence where there had been only suspicion and anecdote, evidence that provided clear directions for change. The broad outcomes of those changes have yet to be discovered, but the process of examining work on the basis of communications from students has been useful in and of itself. So useful, in fact, that the librarian has repeated and expanded the study for the 2009-2010 academic year, to include files of e-mails from faculty, staff, and other groups, in addition to students.

Further examination of the data might reveal demographic patterns or individual usage patterns that might also be enlightening. It would be interesting, for example, to find out if students asked the same type of question more than once, or if questions from individual students showed development of skill and grew more complex over time. In the current study, the librarian is also more careful about including reference questions from Facebook, and it may be that over time, those form a higher proportion of the communication. Deeper discourse or content analysis might reveal other aspects of communication, especially if the study is replicated over a longer period of time.

The most frustrating aspect of the study is the difficulty in presenting results. Just asking for prior consent of everyone who e-mailed the librarian would likely reduce the e-mail, and potentially disadvantage those who would otherwise seek help. If consent was requested, the populations who gave or did not give it might be different enough to further confound the data, and certainly it would complicate the process to the point where the usefulness of the study would be compromised. However, while in terms of dissemination this kind of study has limited worth, it has been very productive in terms of informing the work of the librarian at a local level. I would encourage others to make use of their e-mail as evidence for refining practice.

References

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