

Summary of Discussion for

Information seeking behavior of scientists in the electronic information age: astronomers, chemists, mathematicians, and physicists [at the University of Oklahoma]

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This article sparked several lines of discussion in the class.

One centered on shortcomings in the questions asked of the survey participants. Several people felt that by asking "how would you prefer to obtain journal articles", the author was missing out on some important user behaviors and preferences. If the question were couched in terms of "how do you prefer to search" and "how do you prefer to read" an article, we felt that different answers would have emerged. By conflating the two, the question almost implies an either / or choice. Many people in class expressed a desire for electronic versions of articles for ease of searching / filing / etc., yet many favored reading the article on paper. Of course, at the time the survey was administered, PDFs were not yet established as the *de facto* standard format of electronic journals, and the print quality of the electronic formats available were insufficient for the needs of scientists and researchers. In this light, the question may sound like an either / or proposition because at the time, it truly was.

Another potential shortcoming cited was the relative lack of open-ended questions. As we saw in last week's reading on grounded theory approaches, questionnaires, if too restrictive in their questions, may cause a researcher to miss out on important information, essentially limiting the answers they receive to the choices they are expecting or anticipating. Unforeseen answers or serendipitous discovery of alternative lines of questioning is thus less likely.

In this questionnaire, the only real open-ended question asked was at the end, and it was a generic "how do you like our services?" question. Some in the class thought that by not proposing alternatives ("If we did X, would you like that better than our current Y?") researchers may just say "Yes, we like the current services" because, essentially, they don't know anything else. We thought that if the librarians pointed out some more specific advantages of electronic media, researchers might have expressed a wider array of feelings. Of course, maybe the University system is just that good!

The point was also raised that since the survey respondents were largely established professors, *i.e.* older (and presumably less technology-savvy), this might have skewed the results. The librarians in class commented on the age gap they witness in their professional practice, where younger students and faculty are much more receptive to electronic media than are the older faculty. It would have been interesting to know more specifically the age breakdown of the respondents, as well as the age breakdown of the faculty at large, regardless of whether they answered the survey or not.

The topic of the article naturally touched off a discussion on the state of the "electronic library" today (6 years after the survey), as well as speculation on how libraries will look in 20 years. We noted how electronic journal access is now almost assumed as a default. The percentage of articles that are accessible electronically now is far greater than 6 years ago, and many researchers now assume as a matter of course that a given article will be available to them electronically. The librarians discussed their experiences (largely favorable) of totally dropping print journal access in favor of electronic. There is, of course, the issue of restrictive licensing agreements with the publishers to consider. Excepting that, faculty appear largely receptive to foregoing print access -- the Computer Science faculty has apparently given the green-light to get rid of *all* printed journals!

Students speculated on what libraries will evolve into, given the continuing trend towards electronic access to not only journals, but books as well. Some thought that libraries would eventually have no books at all, instead becoming places for relaxation and studying, and with access to librarians and skilled information professionals. Others thought that libraries wouldn't even exist as we know them -- librarians would have offices and would help users remotely. Any physical books in the collection would be kept in storage and pulled out for users as needed. This would eliminate browsing as we currently understand it, but browsing might become re-defined with better search interfaces.

We also discussed the technical, as well as the personal, reasons that people use or do not use electronic journals. There was unanimous agreement that PDF were ideal for storage, archiving, and searching purposes, but opinions were mixed on using PDFs for reading. Many preferred reading from a printout because it was more convenient (on the bus, for example). Others liked to take notes and highlight important phrases on their paper copies. On the other hand, some argued that they never read PDF on a computer until they got one with a good display. One student cited a lack of adequate printing capabilities for why he reads everything on his computer -- printing even a moderately short article took prohibitively long. One student explained that if he printed out all the articles he had to read, he would have to carry around an unwieldy stack of papers with him.

All in all, quite a fruitful discussion.