

**Academic Libraries in the Digital Data Universe:
The Reference Desk and Technical Memoranda**
Position Paper

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There are many issues that relate to the role of libraries in a digital age. The two that I have been concerned about for a long time are:

1. *The Reference Desk* — Finding data of interest¹ and then accessing these data can be extremely difficult. It is often difficult to know just where to start and there appears to be a widening gap in the expertise of the reference librarian in this regard and the state of the technology. For example, there exist today a number of high level directories that will help one find data sets of potential interest - the Global Change Master Directory (GCMD) for the Earth sciences, the National Space Science Data Center (NSSDC) Master Catalog for the space sciences, etc. but few reference librarians are aware of these or how to use them. In fact, the expertise in data discovery has moved away from the library to the researcher. This is both a problem and an opportunity. It's a problem for the new researcher or student who is looking for data; they have to go through the same, often painful, discovery process as all of their colleagues. It's an opportunity in that expertise exists at many institutions to help train new librarians in these areas and to retrain librarians already on the job. Unfortunately, this is an opportunity that is not been exploited. NSF might investigate the funding of courses at library schools that draw on the data discovery talents of the local research community. This course could be offered both as a recertification opportunity for reference librarians as well as basic instruction for students in library science programs. The course could also address data access methodologies.

In addition to the research community benefitting from more expertise in the library with regard to data discovery, there would also be a direct benefit to those developing data discovery and access methods from more input from the library community.

Bottom line: there are a number of benefits that would derive from a tighter coupling of the research and library communities as relates to data discovery and access.

2. *Technical Memoranda – Gray Literature* —

Although universities have taken the lead in the development of end-to-end data systems in a highly distributed environment, there is one area in which they have

¹In this position paper, my references to finding and accessing data refer to finding and accessing digital data on the web; i.e., finding and accessing remote repositories of data.

taken a significant step backward. In the past researchers often “published” their data in paper form as *technical memoranda* or some equivalent and these reports were (**and still are**) archived in the university’s library. With the advent of the web such technical reports have all but disappeared with researchers “publishing” their data on personal web sites; i.e., the institutional commitment to a long term archive of the data has all but disappeared. This is a trend that must be reversed or much of these data will be lost forever – universities must provide a mechanism for researchers to “publish” their data electronically for permanent archival in the university library.

Acronyms

GCMD Global Change Master Directory

GSO Graduate School of Oceanography

NSF National Science Foundation

NSSDC National Space Science Data Center

URI University of Rhode Island