

Libraries Impact on Research: a Preliminary Sketch by Carolynne Presser

This area, though important and key to defining the role Libraries play in the academic enterprise, is difficult to describe, hard to quantify, and therefore a challenging one in which to develop useful measures. The area was summarized as follows.

What specific library activities have the most impact on the success of the research enterprise locally and globally. An assumption is that the library does indeed have a role. At the global level, measures could be obtained by evidence of use of library resources by non-primary clientele and their output. At the local level, measures could come from evidence of use by entry-level researchers, graduate students, and senior scholars. There is literature on this topic.

There are two avenues investigated thus far:

1. Review the relevant literature.

A key article is, Dunbar and Lewis, “Determinants of Research Productivity in Higher Education.” The article begins with great promise, however the model developed falls back on the usual quantitative data. The authors identify a number of “attributes associated with research productivity.” Included in the list: number of books and journals in the library. This measure is included as one of the “Institutional and Departmental Attributes” category. Also on the list: “availability of technology and computing facilities.” When trying to answer the question: “what is the effect of institutional support on critical resources?”, the authors admit that the only measure available was the institutional support for libraries. The authors found “that in all cases, except engineering and the social sciences, institutional expenditures for libraries were significantly related to departmental research productivity. Beyond the indirect support of librarial (sic) holdings in support of departmental research, this positive effect may also suggest that institutions with more resources provide better resources in many other infrastructure ways as well. Most, if not all, of this infrastructure support should contribute to increasing their research productivity.”

Other research descriptors have been suggested:

1. R&D expenditures
2. Academic doctorates/year
3. Postdoctoral appointments
4. Memberships in academies
5. Faculty quality rankings in research programs
6. Faculty awards and fellowships

Libraries might examine expenditures per doctorates or postdocs, or per faculty. An example of correlation between faculty output and library support could be papers accepted for publication that cite resources held by the library.

Chapter 6 of the *Follett Report: Libraries and the Research* includes various sections worth quoting:

- Distinguishing the role of libraries in supporting the information needs of researchers from their support for teaching is not straightforward. Most libraries have made little or no explicit distinction in operational terms between provision for teaching and research.
- For most of those working in the sciences and in technological subjects, the journal or periodical is a major research tool. It is the means whereby the results of research are most often published, and access to a range of specialist journals is a prerequisite for those who need to keep up to date with the work of colleagues in the same and kindred disciplines. Usually it is access to a wide range of recent journal articles, rather than to long runs of back issues, which is needed.
- The researcher usually also requires a facility to be able to browse through indices and abstracts of articles, and then obtain the full text of an article if detailed consideration is needed. The capacity to undertake literature searches, access to effective inter-library loan systems, and access to large bibliographic databases are also usually regarded as vital.
- In the humanities and the social sciences the needs of most researchers tend to be different. Access to journals is also required, but the need for a long run of a particular title is often more important than in the sciences, because articles tend to retain their relevance for a much longer period. Moreover, periodical literature does not have the dominant significance which it holds for the scientific researcher. Books, in particular specialised monographs, complement the journal as the medium through which research is usually published. In addition, the library is often the principal repository for the primary sources on which a researcher may work. This material is of many kinds, but includes manuscript and printed items, often rare or unique and held in special collections, together with databases of primary material which are increasingly used by researchers in the economic and social sciences and in the humanities. Libraries often provide expertise and facilities to help with the analysis of such materials, ranging from palaeographical advice to computer facilities for database analysis.
- For the humanities and social sciences in particular therefore, the effective research library must offer a range of professional support services.

Another useful item was Rosenblatt's "Developing Performance Measures for Library Collections and Services." Here she reviews studies of "information-seeking behavior" that "describe a recursive process of discovery in which scholars initiate research through a process of

skimming and scanning sources of information, discussing the question with colleagues and browsing in the library.” As the research process proceeds, information is ever more systematically extracted, synthesized, and questioned. In short, the scholar works from source to source, not in linear sequence, but in an ever-widening ring of reference, citations, and discoveries; the research library has traditionally provided the environment in which much of this discovery process can take place.” Anecdotal evidence from individual scholars corroborates the research evidence.

This latter point leads to a second area of investigation: conversations with researchers.

2. What the Researchers Think

At a recent meeting of the University of Manitoba’s Research Committee of Senate, the ARL New Measures Initiatives was reviewed with a focus especially on the question of library support for research. A number of interesting points emerged that need verification on other campuses. Committee members all agreed that technology has improved access to material and use of the library has dropped. When pressed on this issue, they acknowledged that material available on the campus network was indeed provided by the libraries. They just thought it made things so much easier for them. Access to information on campus and from home, etc., coupled with advanced request functions and speedy document delivery made their research lives more efficient. The committee believes that we (librarians) need to gather anecdotal evidence from the researchers in various disciplines. They seemed to think that the questions would be easy to frame. As well, they believed we should look at correlating faculty research output with document delivery use. We had an interesting discussion on the use of “Journal Clubs” in laboratories and research groups, and that we should be talking to these folks as well.

Next Steps: further discussion

Considering the above information, many questions need to be asked. These might include:

1. Can we consider initiating a series of focus groups with researchers on selected campuses to discover this so-called anecdotal evidence?
2. Is there value in correlating document delivery use with faculty research output? What output measures would we use?
3. Has access to electronic resources made a difference to researchers? If so, what measure of resources available would be useful?
4. One observation was forthcoming from a CARL/ARL colleague: We might want to ask the user community to identify themselves beyond our usual classifications (undergraduates, graduate students, faculty members, etc.). Perhaps the users ought to be classified by need rather

than by “status” such as: casual/occasional, intensive, essential, etc. Then, the question ought not to be “how does the library satisfy these various levels of need?”, but rather, “how are these various levels of need satisfied?” In this way our relevancy is legitimized.