Serving Diverse Knowledge Systems in Academia

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Abstract

Libraries and academic disciplines are experiencing a major transformation to the digital era. A challenge for libraries is to adapt and coordinate their transformation with differing rates and types of changes in teaching, research, and scholarly communication among the disciplines they serve. This paper argues that librarians need to acknowledge the diversity of knowledge systems and adopt a strategy that requires collaboration between libraries and multiple communities of knowing in the development and provision of heterogeneous services.

Keywords

diverse academic knowledge systems, homogeneous services, heterogeneous services, professional/client collaboration.

The academic world has always recognized differences among the disciplines. These distinctions are often summarized as disciplinary dichotomies such as hard and soft, pure and applied, behavioral and natural, paradigmatic and pre-paradigmatic, and life and nonlife. Disciplines are “distinguished by styles of presentation, preferred approaches to investigation, and the degree to which they draw from other fields and respond to lay inquiries and concerns.” Research has identified vast differences in “communication structures, reward and stratification systems, and mechanisms for social control” (Del Favero). Because of the distinctions between, and the bonds within disciplines, it is not surprising they have been described as “academic tribes.” (Becher).

As academic libraries continue their transformation of services in this digital era, one challenge is meeting the needs of diverse academic disciplines that are also going through their own transformations to the dynamic digital environment. Again, disciplines differ in the type, rate, and extent of change in how they teach, do research, and distribute the results of their research. Libraries strive to adapt and coordinate their own transformation with the diversity of changes unfolding among the academic disciplines. Towards this end national library associations and agencies are trying to understand disciplinary differences and their implications for library service in a time of change (Association of Research Libraries; Sparks; Palmer, Teffeau, Pirmann).
One thing appears clear; the impact of technological change will not diminish the diversity found among academic disciplines. As prominent information scientist Blaise Cronin observes: “...the ways in which ICTs [information and communication technologies] are used to communicate with one’s peers and disseminate one’s ideas will still mirror underlying differences in epistemic cultures and value systems” (Cronin 13). Not surprisingly, then, a study for the Joint Information Systems Committee (JISC) of the British higher education funding agencies “found a number of areas where differences between disciplines were statistically significant” (Sparks 66). Consequently, as a report undertaken for OCLC states: “The question facing service developers, then, is not what services need to be offered digitally, but rather how do we proceed in the long term to move all services to an e-research platform” (Palmer, Teffeau, Pirmann 34). How, indeed, should librarians proceed?

Traditionally libraries have developed services that focus on the commonalities among disciplines. This tendency has been driven primarily by at least two major factors: librarianship’s commitments to universal services and to efficiency. Both of these tendencies can be traced to librarianship’s adherence to the science model of universalism and rationality. Due to a professional ideology that promotes universal service, there is a strong belief that all services must be provided at the same level and mode to all users. As well, since its inception in the nineteenth century, modern librarianship has displayed almost classic obsessive-compulsive personality traits, exemplified in the father of modern librarianship, Melvil Dewey, of focusing on control, order, and rules; that is, efficiency. The commitments to universality and efficiency have resulted in the development of homogenous services defined by values and practices promulgated by professional institutions, associations, and schools at the national and international level (Birdsall 2008).

However, increasingly library leaders are calling for the need to recognize the diversity of research knowledge systems. Knowledge systems encompass the differing epistemological means of generating knowledge (ways of knowing) and of the resulting institutions, values, and methods employed to preserve, distribute, own, and provide access to that knowledge (knowledge organization). Cronin correctly makes the critical observation, in my view that “The present environment allows communication channels and information resources to be matched more effectively with the cultural characteristics and needs of epistemic communities.” He anticipates “Different approaches and solutions will be adopted at the local level” (16). Clifford Lynch warns that librarians should not overly emphasize the familiar aspects of knowledge systems “that we are comfortable with intellectually, socially and economically, to the exclusion of the new, the unfamiliar, the disturbing, the confusing”.

In other words, there is a need to move from homogenous to heterogenous services. Unfortunately, the commitment to universality and efficiency can be serious constraints to future development at the local level. For example, the
OCLC report indicates that one of the factors determining development priorities should be “services that provided economies of scale across institutions, disciplines or genres of information” (Palmer, Teffeau, and Pirmann 42). Here we see the drive to achieve homogeneity in services and efficiency at the expense of meeting the needs of diverse knowledge systems.

In considering how to proceed, it is instructive to heed the advice of researchers themselves. In a study conducted for the Canadian Association of Research Libraries, a consensus panel of Canadian researchers selected from a wide range of disciplines, identified the need to recognize the diversity of knowledge systems within academic research. The Panel observed that:

Creative and scholarly production in Canada takes place in complex cultural, linguistic and regional contexts. The challenges and opportunities of new technologies add an important dimension to this mix. Diverse and unique knowledge and research results must be presented and preserved in various formats without the application of technology that will homogenize this material. Research and creativity take many forms, from theatrical productions to visual arts, from the study of primates to architecture, from investigation by Aboriginal communities to the visualization of microbes (Birdsall et al).

As a result of the diversity of ways of knowing, the Panel stressed the need to take into consideration that “New methods of producing, preserving and accessing this research must take these points of origin into account.” The logical consequence of this diversity is that “If knowledge dissemination strategies are to be effective and useful to users, they will evolve logically from and be based upon multiple forms and varieties of knowledge content. This means that many forms of knowledge and knowledge systems will be included in strategies of knowledge dissemination”.

The lesson we can draw from the observations of library leaders and Canadian researchers is that library services and modes of dissemination must be developed in the context of the heterogeneity of knowledge systems. Furthermore, these services must be developed in collaboration with the specific communities of knowing, which may or may not coincide precisely with traditional academic disciplines. Such a development strategy calls for an open model of knowledge organization that embodies the following principles:

- It recognizes the diversity of ways of knowing and knowledge systems;
- It embraces the central, collaborative role of members of specific communities of knowing in the formulation of values, methodologies, and institutions to meet the needs of their knowledge system;
- It advocates the reform of legal and institutional structures that will encompass differing knowledge systems;
• It exploits technological opportunities to meet the needs of diverse knowledge systems;
• It is flexible, open-ended, and dynamic; and
• It fosters interdisciplinary collaborative research and practice involving both the knowledge organization community and the multiple communities of knowing (Birdsall and Shearer, Shearer and Birdsall).

A shift from the traditional homogenous modes of providing services to the heterogeneous represents an incremental transformation of how librarians are trained, their values, institutional structures, and the development and provisions of services. The transformation to a professional/client collaborative, heterogeneous model of development and provision of services could take decades but there are already hints, such as Web 2.0/Library 2.0, that such a transformation is not only possible but underway.
Works Cited


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