

Understanding Research Behaviors, Information Resources and Service Needs of Scientists and Graduate Students

Background

The University of Minnesota Libraries received funding in 2005 from the Andrew W. Mellon Foundation and support from the College of Liberal Arts (CLA) to develop a model for assessing research behaviors of faculty and graduate students in the humanities and social sciences. The goals were to explore the needs and relationship between services that are physical and virtual, improve library services that directly support research, and identify discipline-specific needs and areas of common interest. Project staff interviewed CLA department chairs and faculty, conducted a survey and held focus groups with graduate students. [See <http://www.lib.umn.edu/about/mellon/docs.phtml>]

University Libraries staff are using the results to develop “**Scholar’s Collectives**” that support a specific discipline, but also enable exploration of other disciplines, serving as a catalyst for interdisciplinary and collaborative work. These online communities will incorporate a suite of relevant content, tools and services configured to meet expressed needs for **discovery, gathering, organizing, creating and sharing of knowledge resources**.

Online scholar’s collectives will include customized search tools, incorporating recommendations about related materials. They will provide web- and desktop-based content management tools (secure file storage, citation management services) that are personal and customizable to a researcher’s particular needs. These virtual communities are particularly well-suited to supporting collaborative research by centralizing innovative ways to communicate (blogs, listservs, and interactive programs), and to share materials (secure file sharing for controlled versioning, data storage, and distribution of electronic materials). The University Libraries are also exploring the creation of physical spaces to stimulate interdisciplinary interaction.

Project

The Libraries are embarking upon a similar series of studies for University of Minnesota scientists and graduate students in the sciences in order to understand and incorporate their unique information needs into the “Scholar’s Collectives” under development. The University’s strategic positioning process surfaced a number of issues relevant to research infrastructure and challenges of interdisciplinary and collaborative e-science. The assessment of science research behaviors will focus on the elements of infrastructure that support the discovery, use and management of information sources and data. How do scientists share work with colleagues, both internal and external to the University? What kinds of collaborative work spaces are used or needed, both physical and virtual? How do scientists collect, manipulate, mine, and preserve their data? How do scientists use libraries? Are they exploring new forms of electronic publication? What are their requirements for digital repositories that contain both publications and data? These are the types of

questions to be investigated. The project will complement work proposed by the Knowledge Management Task Force, one of the strategic positioning task forces of the Academic Health Center.

Key stakeholders in the project include the University Libraries and the deans of the six schools within the Academic Health Center, the Institute of Technology, the College of Biological Sciences, and the College of Food, Agricultural, and Natural Resource Sciences.

Focus groups with targeted populations of scientists and graduate students, as well as brief voluntary surveys, will be used to assess research practices and needs. Follow-up interviews, as necessary, will also be employed.

Staffing and Timeline

The study is under the direction of **Linda Watson** (Director of Health Sciences Libraries) and **Karen Williams** (Associate University Librarian for Academic Programs). A .50 FTE graduate research assistant will be working closely with **Cecily Marcus** (Coordinator of Research Assessment). The Coordinator and Graduate Assistant will review the literature on information-seeking behaviors specific to this population, and in consultation with the Project Team, identify study participants, develop methodologies for the focus groups and interviews, coordinate that process, and analyze and communicate the data. Liaison librarians in the sciences will be engaged as additional resources/advisors to the project, as will selected faculty and/or research administrators drawn from the stakeholder groups. The project will get underway during Fall 2006 with the results available in Spring 2007.

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