## Academic Libraries and Information Communities: New Models for Supporting Digital Scholarship

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**C** ince the first forays into digital library activity in the early **D** 1990s, academic libraries have been intimately involved in the application of technology to the teaching and research missions of the universities they support. Libraries offer increasingly sophisticated technology training to faculty, and provide critical systems infrastructure and programming expertise to support digital scholarship. As more and more faculty wish to produce born-digital scholarship, they expect libraries to supply the basic technology support services that their academic or campus computing units are often unable to provide. And libraries have rushed bravely into the breach, becoming ad hoc publishers, software developers, and instructional designers. Partly as a result of this electronic outreach activity, libraries are accumulating a critical mass of digital materials not governed by any explicit selection policy. This trend threatens to accelerate, as grant-funded humanities computing projects of all shapes and sizes are turning to libraries to aggregate, disseminate and preserve their materials over the long term. Libraries supporting digital scholarship must therefore manage both technological development and collection development in a way that serves scholars' needs and maximizes the effectiveness of limited resources.

The University of Virginia Library, like many of its peer institutions, is currently developing a large institutional repository for the digital content it acquires, along with tools for ingesting and disseminating that content. But by its very nature, our repository will have rather rigid requirements with regard to standards and format. Even when the repository development is complete, our faculty and their collaborators will continue to produce scholarly ephemera - born-digital writings, archival materials, teaching resources, and experimental tools - that fall outside the repository's collections parameters but which the Library will nonetheless be expected to help sustain and organize in some way. At the same time, the Library will need to encourage the use of its digital resources beyond the core group of early adopters by making it easy for users to find and exploit relevant materials in their subject area. In order to meet these challenges, the UVa Library has developed an "information communities" model to complement its digital repository initiatives. We hope this model will allow us to identify common needs, establish priorities, and minimize redundant digitization and tool-building efforts. Ideally, a robust information community will foster scholarly communication in all its diverse forms; it will encourage innovation and spark new areas of cross-disciplinary and cross-institutional research.

At its core, the information community involves an equilateral relationship between people, collections, and tools. The people are scholars, students, researchers, information professionals, and (for public institutions) the community at large. These people serve many roles - they are producers and consumers of digital content; they are authors, editors, commentators, selectors, and publishers. The collections are conceived as broadly as possible - primary and secondary scholarship, both formal and informal, across all media types: text, images, maps, datasets, audio and video. The tools can be divided into several sub-categories: communication tools, like rosters, mailing lists, wikis, and virtual conferencing tools; analytic and interpretive tools, such as software for textual collation, or for the manipulation of statistical data: authoring tools that support standard markup schemes; and hybrid tools, such as collaborative editing tools or peer review tools that combine the communication and authoring functions. This triangular relationship facilitates sharing - sharing scholarly materials and sharing tools for accessing and analyzing those materials. The community can foster the formal or informal scholarly exchange of ideas, in the form of new publication as well as conferences, seminars and online discussion.

The University of Virginia has several active information community prototypes. Two are of particular interest. The Tibetan and Himalayan Digital Library (THDL), founded by David Germano in the Religious Studies department, developed organically from the need to allow a small but globally dispersed group of Tibetan experts to collaborate effectively, in order to build a comprehensive online archive of Tibetan materials. The site includes materials across all media types - literary and religious texts, dictionaries, image sets, gazetteers, maps, statistical datasets, timelines and time-based media. The tools necessary to support this community are highly specialized and include Tibetan, Nepali, and Chinese fonts, along with the input tools necessary to generate materials in these languages, geo-referencing and interactive mapping tools, collaborative editing tools, and tools for the multilingual transcription of audio and video materials.

*The American Studies Information Community*, a two-year grant-funded pilot project, sought to capitalize on a substantial but unintegrated body of American Studies-related digital materials produced by the Library, its electronic centers, and affiliated research units. Federated search and browse interfaces

were developed to create easy access to these widely dispersed materials. New core collections centering on a locally relevant topic (the Lewis and Clark expedition) were digitized, and faculty used these in class both as teaching resources and as seed materials for digital student projects. The community also published a collaboratively edited database of electronic resources in the field, which will help users locate materials for research and teaching but will also identify gaps in the field that might indicate opportunities for future digital projects.

Based on our experiences at Virginia, we've identified some key factors contributing to the success of an information community or similar initiative. The community needs at least one dedicated, charismatic faculty leader who can organize and motivate colleagues across institutional boundaries; this person should ideally be at a career point where he or she can take chances on speculative projects that might fail. The community should be bold and seek out innovative, ambitious ideas, despite the current budget-conscious institutional inclination toward caution. An information community is most effective when centered around "keystone" collections of value to the scholarly community, and should ideally assemble a body of primary materials large enough to support meaningful analytical study. A scholarly community needs a sense of purpose and a clear set of organizational principles based upon its purpose. It needs a stable institutional home, with sustainable funding. Finally, it needs to consider all of its potential constituencies and try to anticipate their particular needs.

## **Bibliography**

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