# Corporate Scholarship: An Oxymoron?

For many people, "corporate scholarship" is an oxymoron -- a combination of contradictory or incongruous words. To the marketer, it's boring, esoteric, and dry. To the product developer, it's impractical. To the strategist, it's irrelevant. To the C.I.O., it's an information retrieval problem.

But some managers, such as Dave Burnett, Director of the new Pfizer Research University, have a different perspective. The former University of Pennsylvania dean believes that applying principles of academic scholarship can help Pfizer learn faster and increase the rate of return on its intellectual assets. We think Dave is onto something.

**Academic principles in the intranet age**

Modern western universities were born when associations of students began to congregate to hear lectures by noted teachers. According to the Encarta encyclopedia, these communities developed the concept of the "college" from the Latin word collegium, meaning "society." Students migrating from the same country often banded together in groups. In this loose, free-wheeling, and global environment, the principles of scholarship had a very practical value. They were the currency that enabled an international commerce in ideas, a currency that is again relevant in the unregulated, global, and fast-paced environment of the Internet era. The following chart shows some of these principles and related knowledge management techniques.

| Issue | Scholarship principles | Knowledge management techniques |
|---|---|---|
| Test the validity of an idea | citations, bibliographies, peer review, "scientific method" | hyperlinks to source materials |
| Find the "truth" | "academic freedom," consensus decision making | cross-functional teams |
| Avoid re-inventing the wheel | publication, libraries, conferences, professional degrees and certificates | electronic repositories, corporate portals, communities of practice |
| Find relevant research quickly and easily | librarians, bibliographic databases, reserve book room, textbooks | search engines, industry and professional portals, virtual libraries |
| Ensure the quality of debate and research | Professional degrees, peer review | communities of practice, hiring, promotion, and compensation practices |
| Use ideas without violating individual rights | "fair use" copyright rules | electronic commerce, cooperative links, licensing |

It is ironic that while traditional universities are under siege from online degree programs, they have much to offer corporate knowledge managers in the way of intellectual underpinnings. In some cases, corporate knowledge managers have made great strides in replicating the university intellectual infrastructure -- for example, virtual libraries, corporate information portals, e-mail base communities of practice, and virtual meetings. In other areas, they have a way to go. Areas that need more attention include:

• supporting the research and publishing activities of individuals and small teams;
• providing quality assurance for intellectual assets;
• re-using knowledge;
• balancing the intellectual property rights of individuals with those of the corporation and the public.

**Catering to Ph.D.'s**

Companies that employ large numbers

of Ph.D.'s or other highly educated researchers -- e.g. pharmaceutical companies, medical research organizations, and consulting firms -- are usually the first to tackle these issues. Examples include:

• The Mitre Corporation's KEAN (Knowledge Exchange & Annotation eNgine) project -- a software system that lets individual researchers tap into the annotations, subject headings, links, and referrals made by colleagues.

• The National Security Agency's Practice Centers, IDEA program, and Guild system to promote information sharing.

• Harvard Pilgrim Health's "knowledge bounty" program that pays employees for their contributions to corporate intellectual capital.

• Lotus Institute's PeopleFinder program that facilitates communication among people with similar interests.

• The National Institutes of Health proposal for E-biomed, an electronic publishing system for biomedical researchers.

**The need for an intellectual infrastructure**

For most companies engaged in knowledge management, the emphasis is on building corporate electronic repositories, facilitating global collaboration through E-mail, and making relationships with suppliers and customers more efficient. Yet the need for supporting the research and publishing activities of individuals and small groups is acute. According to a study conducted in 1997 by Reuters, 60% of managers surveyed think that the cost of gathering information outweighs its value, yet 84% said they store information for future reference. In the same study, 83% believed that information overload could be eased through training specifically designed to help staff gather, organize, and use information.

But companies that want to support individual and small group "scholarship" face several problems:

• How to integrate formal or structured information (e.g. published articles, reports) with informal, unstructured information (e.g. E-mail messages). Many companies use one kind of software for organizing formal documents and another for e-mail collaboration and scheduling meetings. And usually the two systems don't talk to each other.

• How to acquire and share articles produced by external commercial publishers (e.g. scientific journals, trade magazines). The problem here is two-fold -- how to find information online and how to share it without running afoul of copyright laws.

• How to organize their own information resources for re-use. It's one thing to download a Web page or magazine article; it's quite another to find it again in six months.

• How to publish "rich," in-depth documents in multiple formats (print and electronic), complete with drawings, annotations, links to internal and external source materials, and background information on contributors. The technology is available, but chances are good that no one on the team has the time or expertise to use it.

**Intranet database toolkits**

Recently, several major information vendors have announced intranet "toolkits" that will help solve two of these problems -- how to link to individual external articles without violating copyright and how to reduce the cost of finding information in external databases. These toolkits let authors and knowledge base editors do the following:

• add persistent links (i.e. links

that won't disappear or move);

• create reading lists of articles on a specific topic;

• charge the cost of an article to a credit card, department, or project;

• restrict the use of some sources to certain individuals or groups (useful when charging for information services or tracking usage of specific documents by an individual);

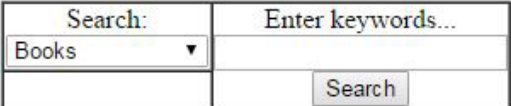• add a pre-formatted search form (e.g. find all articles on benchmarking).

**Toolkit examples**

Here are some examples using the Amazon.com Web site, the Dow Jones Publications Library, and the Montague Institute's Knowledge Base Publishing Library. Toolkits make it easy for knowledge base editors who are not HTML programmers to add custom links to their own Web pages, as we have done in the table on the following page.

**Applications**

At the Montague Institute, we use custom links to:

• Make all the links in our bibliographies accessible to clients. Custom links save time by allowing readers to go directly to the source and solve the copyright problem by permitting each user to purchase his or her own copy of the document.

• Build our virtual libraries. Pre-formatted search forms make it easy to find and download copies of articles we want to archive in our private virtual libraries. For example, when we find an article of interest in the print edition of Computerworld, we can use a custom link to find the article on the Computerworld Web site.

• Compile reading lists for our

| Function | Example |
|---|---|
| Persistent link to a specific document (in this case, a book) Useful for preparing footnotes, bibliographies, and reading lists. | Adventures of a Bystander by Peter Drucker from the Amazon.com book database. |
| List of books about benchmarking. Useful for helping readers search for materials on related topics listed in internal or external databases. | Books about benchmarking. Automatically searches the Amazon.com book database using the keyword "benchmarking." |
| Charge an article to a specific account. Necessary for providing access to articles in commercial publications, especially when the reader wants to charge research to a specific project or client or when access to fee-based materials is not covered by a corporate contract. | "The 'click here' economy" from Business Week. If you are a Dow Jones Publications Library subscriber, this link takes you to a brief citation for this article. When you click on the title, you'll be asked to enter your Dow Jones account number.. If you're not a subscriber, you'll get a screen asking you to log on or sign up. |
| Restrict use of an article to a particular individual or group using passwords. | Citation for the Teltech case study from the Montague Institute Knowledge Base Publishing Library. |
| Pre-formatted search of the Amazon.com book file. This technique saves time by jumping directly to the relevant search form in the desired database -- especially useful when there are a large number of databases to choose from. | Search: Books ▾  Enter keywords...  Search |

self study courses. Books on the reading list can be linked directly to an online bookstore for easy purchase. Articles can be linked to a specific document on a Web site or in a commercial database. The end result is the equivalent of a specialized virtual bookstore/reprint service/reserve book room.

The Philadelphia law firm of Dechert, Price & Rhoads uses the West Publishing intranet toolkit to:

• Support caselaw research using specialized database searches and lists of free caselaw Web sites.

• Support environmental research using links to environmental agency Web sites and a commercial database containing each state's environmental regulations.

The Washington law firm of Howrey & Simon uses the Lexis/Nexis intranet toolkit to:

• Support practice-oriented research. Custom links streamline the research process and direct users to specialized collections of electronic materials. The knowledge base editor can either download one of 17 "canned" practice pages prepared by Lexis/Nexis or design his/her own page.

• Provide news and updates in specific topic areas. Using pre-formatted searches, users can track recent stories about a client or product, find the most recent Consumer Product Safety Commission announcements, or find updates to a specific document or case. According to Roger Skalbeck, Howrey & Simon's knowledge base editor, this feature reduces the time to locate cases in new subject areas from weeks or months to several days.

• Prepare bibliographies. Roger's team can not only provide links to specific documents but can also provide personalized annotations.

As more companies realize the importance of supporting corporate scholarship at all levels -- enterprise, department, team, and individual, they begin to use tools and techniques such as intranet toolkits and custom links. The result is the virtual equivalent of the medieval university, which evolved to meet the needs of a multi-national group of scholars who created the intellectual capital necessary for the development of modern medicine, science, and commerce.