

UC Santa Cruz

Library Staff Presentations and Research

Title

Building the Library Starter Kit: Developing New Technologies for Instruction

Permalink

<https://escholarship.org/uc/item/4gs5b45m>

Journal

Reference Services Review, 26(3/4)

Author

Murphy, Deborah A.

Publication Date

1998

Peer reviewed



Reference Services Review

Building the Library Starter Kit: Developing New Technologies for Instruction
Deborah A. Murphy

Article information:

To cite this document:

Deborah A. Murphy, (1998), "Building the Library Starter Kit: Developing New Technologies for Instruction ", Reference Services Review, Vol. 26 Iss 3/4 pp. 109 - 116

Permanent link to this document:

<http://dx.doi.org/10.1108/00907329810307803>

Downloaded on: 04 December 2015, At: 13:40 (PT)

References: this document contains references to 0 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 181 times since 2006*

Access to this document was granted through an Emerald subscription provided by emerald-srm:414563 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

BUILDING THE LIBRARY STARTER KIT:

DEVELOPING NEW TECHNOLOGIES FOR INSTRUCTION

Deborah A. Murphy

Introduction

Each fall thousands of new students arrive at the University of California at Santa Cruz (UCSC). The library's goal is to ensure that each new user has the basic skills to enable them to find, evaluate, and use information resources from print, online, and Internet-based sources. But the reality is that the many orientation programs, online classes, and printed documentation the library provides may not be available when and where students need them. Our bibliographic instruction program had to evolve to meet the needs of an increasingly diverse user population with varying learning styles.

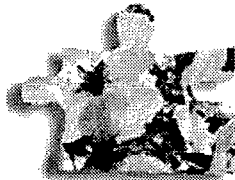
The World Wide Web (WWW) offered a new medium to address this need, with the potential for providing a self-directed approach to learning available all hours, from any WWW station, on or off campus. A combination of grants, student developers, and lots of sweat equity was used to create a WWW virtual tour of McHenry Library. This was expanded to become the "Library Starter Kit" <<http://bob.ucsc.edu/library/ref/instruction/skit>> (see figure 1), a WWW resource that provides new users with the basics for getting started with library research. The Starter Kit includes

- an expanded virtual tour of the library with visual images, maps, and links to additional information;
- a guide to "Constructing the Research Paper" covering the basics of research methods;

Murphy is instruction coordinator and reference librarian, University of California, Santa Cruz, Santa Cruz, California. <damurphy@cats.ucsc.edu>. This article is adapted from her presentation at the 1998 LOEX-of-the-West Conference.

Library Starter Kit

Solving the research puzzle...



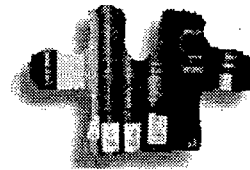
McHenry Library Virtual Tour
Come for a visit!



Constructing your Research Paper
A quick guide on how to start.



New!
The UCSC NetTrail
An Online Literacy Course for:
*WWW
*E-Mail
*Library Resources
*Newsgroups



Subject Guides
More research help arranged by topic.



Classes & Workshops
Where to go for more help.

Figure 1: The Library Starter Kit

- a growing list of specialized subject guides for detailed information on researching specific topics;
- a schedule of current online library research classes and workshops; and
- the UCSC NetTrail: an interactive online literacy tutorial.

Today, the Starter Kit is being used in a variety of instructional settings by librarians and faculty as well as an outreach tool for local schools, colleges, and community members who wish to learn more about library services and resources. New additions in development include WWW tutorials on using the library's local catalog and the Melvyl Library System.

What follows is a description of the initial project, its growth and expanded development, the guidelines used in its creation, discussions of usage, and a preview of future additions.

Instructional Issues in the UCSC Libraries

The University of California, Santa Cruz is a medium-sized campus with a student population of 10,500, the majority of whom are undergraduates. McHenry Library, the largest library on campus, strongly supports the needs of the undergraduate

student. Knowing how to utilize the library effectively is one of the single most important skills that undergraduates must have in order to succeed in completing their degrees, so the library has an active instruction and outreach program. This instructional program reached over 5,000 individuals during the 1994-1995 academic year.

Instructional sessions cover a wide spectrum of topics and are offered in many formats. Sessions can range from one-on-one to large groups of several hundred. A key starting point is the overview we provide new users to the library and its resources. At the start of the academic year we offer library-led orientations and numerous online presentations on library resources. Regularly scheduled classes covering diverse aspects of online research are available throughout the year. We also offer more specialized instructional sessions to classes in all disciplines at locations around campus, with a special emphasis on the increasingly numerous online resources available within and beyond the library.

The library provides assistance at a reference desk available 60 hours a week where users can get help and instruction. There is an extensive collection of print-based online search aids and subject-specific research guides as well as a "Quickstart" program utilizing student database assistants who provide brief one-on-one online search instruction for users.

Though the library has made substantial inroads connecting with and orienting new users to all of the services outlined above, there is still a steady stream of students who miss all of these opportunities and face the often painful prospect of trying to learn online search skills with the pressure of research paper deadlines looming. In addition to the undergraduate population, a growing number of new users are staff, faculty, and junior transfer students, members of the local community, and students from other schools. Trying to address the varied searching skills of all of these individuals while meeting their research needs can create a stressful environment for them as well as reference desk staff.

The WWW: Pros and Cons

There has been a natural progression in the formats (print, video, computer-based) available for our instructional program that follows the evolution of new technologies. UCSC students have approximately 4,000 Ethernet connections available in dormitory rooms throughout the campus. With access to the Internet becoming more ubiquitous, the time seemed right to develop a World Wide Web (WWW) site that would provide a virtual introduction to library resources along with an overview of reference services. Such a resource had the potential to supplement our current teaching formats and provide a new medium for disseminating information.

The WWW offered several interesting instructional advantages. The capability of using text, graphics, animation, and sound expanded the reach of our current online resources. These features gave us additional tools to address the varied learning styles of our diverse user community. WWW-based access could provide users with library basics regardless of their location, library hours, or staff availability as well as potentially providing better access under Americans with Disabilities Act (ADA) guidelines. Given that instructional demand continues to exceed the supply of librarians available to teach, a WWW-based resource would allow us to increase support for new undergraduate and junior transfer students. The WWW availability to off-campus users also could increase support of community outreach, allowing us to reach future undergraduates in local elementary schools, high schools, and community colleges.

The minuses in developing an extensive Web-based resource of this nature were fewer but significant. The first obstacle was that no similar models were available at UCSC, which meant starting development from scratch. The second major issue was the lack of additional library staff support, funding, or release time to support this development. Finally, as the primary

author, I needed to acquire the necessary HTML authoring and graphics skills to create and maintain whatever sites that ultimately were developed.

Pilot Project: The Virtual Tour

A pilot project was a reasonable starting point and led to a proposal to develop a virtual tour of McHenry Library that would provide a coordinated overview of available resources. A virtual tour would fill a pressing need for users unable to attend the orientations offered at the start of fall quarter. It would provide a service we were unable to offer students most of the year and would be an immediately useful pilot project. Deciding to develop a WWW instructional resource was easy; actually accomplishing it was more challenging.

I decided early on that I would need technical assistance in developing this initial site. With no additional library funding or staffing available, I looked outside the library for support. The UCSC teaching support office had been selectively funding creative projects in support of undergraduate education. Competing for a limited amount of annual funds, I was awarded a grant to support a student WWW developer for approximately 100 hours.

I began the project by developing a checklist of development issues. Clearly it was essential for the continued usefulness of this site that I be able to keep it accurate and current. This meant not just creating the content, but learning enough about Web publishing to be able to edit and change files. I hired a student developer with a strong instructional background, since he would need to work with me in my roles as both project coordinator and novice Web developer.

Initial development involved studying other virtual tours available on the Web and noting which features and layouts worked well. Looking at tours developed for nonlibrary sites including Timothy Leary's home and the Jelly Belly jelly bean factory, was extremely useful. The next step was to define a storyboard and script. This was followed by an initial layout on paper with design features noted. All of this pre-planning was important in developing a realistic timeline for the project. Equipped with a script, a camera, a scanner, and a general layout and design, work progressed smoothly; August 1996 saw the unveiling of McHenry Library's first virtual tour (see figure 2).

The Next Step

Discussions with a number of campus colleagues as I worked on this initial version of the tour led to an offer of help from an upper-division computer science course on multimedia publishing that selected five or six projects per year from around the San Francisco

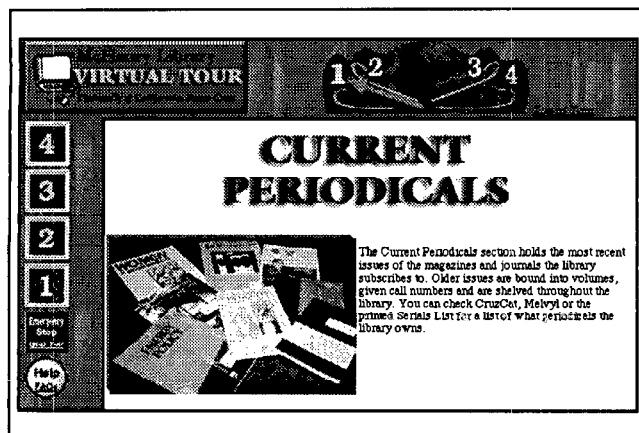


Figure 2: The Virtual Library Tour

Bay area. Given the lack of additional development funds at this point, this was an ideal opportunity. The project I proposed was the Library Starter Kit, an expanded WWW-based resource to provide new users with the basics for getting started with library research. Their offer meant not just one but a team of students would work with me on developing these pages.

As this project grew in size and complexity, it became even more essential that I continue to be able to edit and update the content. This meant making a larger commitment to learning the necessary software and tools needed for development. I decided to enroll in the multimedia publishing courses and become not just the project client, but also a member of the actual development team. This unique role meant learning and working closely with four talented students and giving detailed content, development guidelines, and immediate feedback on design and layout.

The contents, it was decided, would be a variety of tools and resources consisting of

- **The McHenry Library Virtual Tour**—A revised and enhanced version of the original virtual tour with a new visual organization and metaphor that places the tour in the context of a real-world experience. These revisions provide easier navigation, a better integration of images and text, links to additional information, and inclusion of multimedia components.
- **Constructing Your Research Paper**—This section provides a sequential overview covering the basics of the research process. Broken down into discreet steps, it contains text instructions as well as links to resources and other useful sources of information.
- **Subject Guides**—These guides have their origins in a large collection of hard pathfinders created

by UCSC librarians and available in the reference area. Converting these to a WWW format meant being able to enhance the materials considerably. They are interactive resources that contain listings of print and online research resources on a particular topic and links to related databases and WWW sites.

- **Classes and Workshops**—This is an updated listing of currently available hands-on library classes focusing on online research (see figure 3).

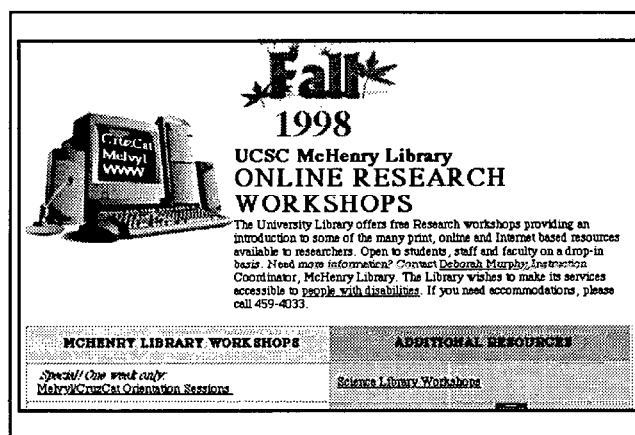


Figure 3: Library Online Workshops

Development of the Library Starter Kit

Though the scale of the project had grown, the basic intent remained the same: to provide new students another way to access resources and information orienting them to the basics of library usage and research. The audience was primarily first- and second-year UCSC students and secondarily junior transfer students, non-UCSC researchers, prospective students, and the general public. In addition to following general layout and design guidelines for Web publishing, I emphasized the following criteria:

- **Work must meet UCSC Americans with Disabilities Act (ADA) guidelines**—The University Library is committed to ADA compliance, and all materials placed on the library Web site are required to meet the campus guidelines.
- **The client must be able to make basic revisions**—The library is subject to constant change, so whatever this team created eventually would need to be revised—design, programming language, and organization had to be clearly and logically laid out. It also meant providing documentation to the client with enough information on site layout, construction, and any special

features sufficient to enable the client to make basic changes.

The project continued development over the course of two academic quarters, about six months. The first quarter was devoted to laying out the overall structure of the kit, developing the new resources, and creating a "look and feel" for the site. The kit is based on modules that can function independently of one another, but with an integrated navigation system. Having an identical "look" shared by all modules has worked to our advantage. It means that we can create new modules using a format that works best for each topic rather than trying to make all the topics we wish to include fit one template or format.

I supplied all content, including text and images, to the development team. Each of us brought different skills and expertise, which led to a far more interesting and creative result than I could have produced working alone. As we worked, it became clear that project coordination was crucial if I was to have a finished and usable resource at the end of this process. Much of my work involved facilitating good communication among the student developers and me. Ultimately, this was a crucial component in ensuring that the Starter Kit was not a partially completed student demo project but an actual functioning Web resource. Because our team met regularly to consult and comment on each other's work, at the end of this first quarter I had a working version of each resource for the site.

The second quarter was devoted to exploring multimedia applications and focused solely on revising the look and feel of the McHenry Library Virtual Tour. The aim was to move away from the long, text-driven pages of the original tour toward a more dynamic environment with navigation modeled on real-world experiences. Incorporating frames, animated GIFs, and Shockwave movies (made with Macromedia Director), the resulting tour offers a different experience from the original version.

The most difficult decision of the second quarter project was choosing the metaphor to use for the tour. I felt it was important to provide an environment that had some relationship to the way users move through the library. We decided finally to use the real-world experience of an elevator, with navigation tools masked as buttons and dials in frames surrounding doors that opened on the chosen location. Again, coordinating the project proved somewhat challenging with five team members each trying different approaches within their individual sections, but by the end of the quarter we had integrated these various pieces into a cohesive library visit.

Post-Development Issues

After two quarters of student/client teamwork, the Starter Kit was well under way. However, a substantial amount of work remained to be done before these pages could be made available to the public. The bulk of this final work was a detailed look at the virtual tour to ensure a uniform use of images, text, and links and, of course, to fix the inevitable bugs. Though tedious, this was not difficult and the first public release of the Library Starter Kit was in April 1997. Subsequent work has focused on adding and enhancing the existing sites, primarily adding new additions to the subject guides. This site eventually will grow to include the entire collection of hardcopy subject guides available in the library.

Several additional workload issues became evident after the initial development of the Starter Kit. The sheer size of many of these sites made keeping pages current a major workload issue, especially in regard to the subject guides, each of which has gone through at least one major revision since its creation. How best to handle these workload issues has yet to be addressed, but I still retain primary responsibility for all sites. As more instructional sites were developed, it became clear that not all of them would become parts of the Starter Kit. A new library instruction page was created that incorporated all instruction-based sites into one annotated list with links to each.

Applications

The Library Starter Kit can be used in a number of instructional environments:

- **A resource available on demand to users browsing the library home page**—The individual components of the Starter Kit are available in several places on the library Web site. Links back to the Starter Kit home page give users an overview of additional resources. Though initially developed for just McHenry Library, continued expansion has made it useful for new users at both McHenry and Science libraries. A prominent position on the McHenry home page and campus-wide e-mail announcements also have helped users locate the Starter Kit.
- **A link for instructors to add to their own WWW pages**—UCSC faculty are beginning to create WWW-based resources for their classes and now can place a link to the Library Starter Kit for students to use as a starting point in the research process.

- **A lecture tool for library instruction**—All of our library instruction sessions, whether in the library or elsewhere on campus, include online components. The Starter Kit has links to many of the key introductory resources that are presented during these sessions. This simplifies the preparation for library instructors and gives students a single starting point to remember when they search on their own. The virtual tour in particular allows us to vividly bring the library into the classroom, presenting maps and images of materials as we lecture.
- **A resource for library-related course assignments**—Several library-based instructional sessions will include assignment portions that incorporate usage of the Starter Kit. These courses are primarily first-year core and lower-division writing classes, which provide students with an introduction to critical writing and research skills.

The Newest Addition: The UCSC NetTrail

“NetTrail: The UCSC Trailhead to the Internet” (see figure 4) is the University of California, Santa Cruz WWW online literacy course developed by a cross-campus team of UCSC faculty, librarians, computing staff, and academic staff. NetTrail provides for users new to the online environment a grounding in basic online skills as well as an introduction to information concepts and specialized resources. Through a set of four self-paced modules, students have an introduction to browsing the World Wide Web, using online library resources, newsgroups, e-mail, and a Netiquette overview. Each module contains self-paced learning materials that introduce and “teach” the topics followed by one or more interactive exercises where students can test their knowledge. The NetTrail exercises interact with CGI (Common Gateway Interface) scripts that provide immediate feedback, as well as record exercise completion information for instructors to track which students have successfully completed the modules.

The NetTrail has been completed successfully by over 700 students from core, writing, humanities, and computer literacy/engineering courses and is expected to be available for general campus use in Fall 1998. In addition to course-integrated instruction, other uses for this course include on-demand reference for students needing introductions to certain skills while in pursuit of other topics (e.g., students doing library research but needing introductions to using the WWW) and faculty and staff who may need additional Internet instruction, distance learning for students off-site, and integration into a UCSC information literacy program.

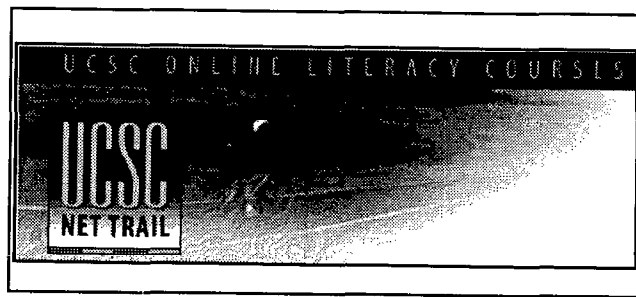


Figure 4: The UCSC NetTrail

A recent award of a sizable instructional technology grant will allow continued refinement and expansion of this project.

Statistics

An interesting feature of our Web server is the log reports that can be generated, and which give statistics on the number of times a site has been visited. This has been a useful means of tracking patterns and increases in usage. The numbers in figure 5 reflect the number of times the home page for each site has been visited.

This statistic tracking revealed a number of usage issues. In areas with lower than expected usage, it prompted a re-evaluation of usability and on-campus site promotion. It was also interesting to note which sites were being used by non-UCSC researchers. Seeing how heavily used the site “Constructing Your Research Paper” was led to the discovery that it is a featured site in Yahoo!’s Internet Life.

Usage Issues

Integrating the resources from the Starter Kit into our instructional program has been a steady but slow process for a number of reasons. The library is still transitioning to a more WWW-based environment. The key online resources for the library are being searched at this time primarily via telnet and the majority of our online search stations are not WWW-capable, though a WWW interface for Cruzcat, the UCSC local catalog, is available and a WWW version of the MELVYL Library System is under development.

Teaching styles and reference desk assistance will need to evolve to keep pace with technology. Since so much of what librarians do in these areas is already heavily technologically oriented, keeping abreast of WWW-based resources, hardware and software changes, and user demand are constant challenges.

Librarians and users face other barriers relying on WWW resources. Increased traffic on the Internet means that accessing the sites on the WWW often can

Site	Dates	Visits
The Library Starter Kit	(8/1/97-6/7/98)	6,147
McHenry Virtual Tour	(8/1/97-6/7/98)	2,719
Constructing Your Research Paper	(8/1/97-6/7/98)	34,458
Subject Guides	(8/1/97-6/7/98)	10,344
UCSC NetTrail	(11/22/97-6/13/98)	2,510

Figure 5: Number of times the home page for each site has been visited

be problematic, especially for afternoon-based instruction sessions when Internet usage is highest. In addition, the UC Libraries systemwide have had problems with the reliability of our network provider. These issues mean that researchers may not be able to access information when they require it. These are far more difficult issues to resolve.

Additional Issues

There is a difficult balancing act to maintain between the hours spent in developing and updating Web pages versus the returns in terms of instructional value. At this point, it is more useful to look on these projects as important first steps in exploring new teaching technologies rather than focusing on how heavily the sites are used. The NetTrail is the most straightforward site to evaluate and we look forward to using instructor and student feedback to continue refining this resource.

Another issue that one might wish to consider when committing heavily to Web authoring is the value placed on Web-based publications as opposed to print publications. This may be important to consider if your work environment places great importance on print publications in the formal review process. This issue currently is being experienced by new faculty as they move up the tenure ladder.

Choosing your audience is also an important consideration if you wish your site to be used outside of your own campus. Campus-specific pages can be of great value to your own local users, but that same specificity may limit the site's usage outside of your campus.

Future Enhancements

The Library Starter Kit is a dynamic site. A Spanish-language version of the McHenry Virtual Tour will be implemented in the near future. Additional modules planned for the UCSC NetTrail will focus on more advanced search features as well as a research methods component. The intended audience will be students in the UCSC writing program who already

will have completed the basic NetTrail in their core courses.

Creation of a "Teaching Toolkit" for library instruction is also in progress. This will be a compilation of all of the diverse web-based instructional resources that the library has developed into a one-stop shopping site to allow librarians to quickly assemble individualized Web pages for their research classes.

Conclusion

Library users, primarily undergraduates, have in the Library Starter Kit a new starting point to learn the basics of online research. Containing a virtual tour of McHenry Library, a guide to constructing the research paper, a collection of subject guides, and a schedule of library classes, the Starter Kit is available 24 hours a day from wherever users can access the Internet. It supplements and, in some instances, expands upon the library's collection of hard-copy search aids and subject-specific research guides, orientation tours offered at the start of each academic year, and online research classes.

The Library Starter Kit also provides the reference desk with a self-paced collection of resources to offer users who prefer to explore the library independently. Librarians and faculty can integrate the Starter Kit into their online instruction and provide links to it on their own WWW class resources. Instructors of introductory classes for lower-division undergraduates will be able to incorporate library research components more easily into their syllabi.

No one would ever start an "interesting" project if they knew how much work it ultimately would end up being. Creating the original Library Virtual Tour and subsequently the Library Starter Kit required the expenditure of a large amount of time and sweat equity. Though the Starter Kit is currently available as a WWW site, it remains a work in progress. It will require a continuing commitment to maintain and expand existing components, add new WWW search and multimedia features, and develop additional resources. Given the changing nature of technology, it can be safely assumed that most of these resources will need to migrate to new formats in the not-so-distant

future. In spite of these issues, it has been an exhilarating experiment in exploring innovative approaches to instruction and has expanded the horizons of the library's instructional programs.

WWW Sites

McHenry Library Virtual Tour <<http://bob.ucsc.edu/library/tour>>

The Library Starter Kit (contains links to The Virtual Tour, Constructing Your Research Paper, Subject Guides, Workshops, and the UCSC NetTrail) <<http://bob.ucsc.edu/library/ref/instruction/skit>>

McHenry Library Instruction <<http://bob.ucsc.edu/library/ref/instruction>>

(Continued from page 102)

Questions to Consider

As you develop your own strategies for establishing campus partnerships and consider the role of your library in campus faculty development efforts, consider the following questions:

- What is your vision for information literacy?
- Who are your potential campus partners?
- What are the important initiatives on your campus?
- How can you help those initiatives succeed?

- How can you help faculty succeed?

Once you answer these questions, you will be well on your way to developing a strategy to help your campus initiatives succeed and to advance your information literacy agenda.

NOTES

(Continued from page 108)

7. Robert E. Brundin, "Education for Instructional Librarians: Development and Overview," *Journal of Education for Library and Information Science* 25 (1985): 188.

8. Lee Shulman, "Teaching Alone, Learning Together: Needed Agendas for the New Reforms," *Schooling for Tomorrow: Directing Reforms to Issues That Count*, ed. by Thomas J. Sergiovanni and John H. Moore (Boston: Allyn and Bacon, 1989), 181.

9. Shulman, 181.

10. Palmer, 8.

11. Pat Hutchings, "Breaking the Solitude of Teaching," *Metropolitan Universities* 5 (1994): 22.

1. *American Library Association Presidential Committee on Information Literacy, Final Report* (Chicago: American Library Association, 1989).

2. Edgar H. Schein, *Organizational Culture and Leadership* (San Francisco: Jossey-Bass, 1985), 2.

12. Boyer Commission on Educating Undergraduates in the Research University, *Reinventing Undergraduate Education: A Blueprint for America's Research Universities* (5 May 1998): <<http://notes.cc.sunysb.edu/Pres/boyer.nsf/>> (20 June 1998); Diane M. Enerson, *Creating a Community of Teachers: The Penn State Course in College Teaching*, June 1996, Document Reproduction Service No. ED4000253; Pat Hutchings, "Breaking the Solitude of Teaching," *Change* 25:6 (1993): 14-21; and Palmer.

13. Hutchings, 19-20.

14. Robert J. Menges, "Fostering Faculty Motivation to Teach: Approaches to Faculty Development," *Teaching Well and Liking It*, ed. by James L. Bess (Baltimore: Johns Hopkins University Press, 1997), 410.

15. Palmer, 13.

This article has been cited by:

1. Nick Joint, Bob Kemp, Susan Ashworth. 2001. Courseware in academic library user education: A literature review from the GAELS Joint Electronic Library Project. *ALT-J* 9, 26-42. [[CrossRef](#)]