The Future Is Now: Part I

By Scott Garrison,
Assistant Dean for Technology

This and the next issue of Gatherings highlight some of the technology behind the 21st century library, especially at WMU. As you read the following paragraphs, I hope you'll gain a sense of our vision for technology in the University Libraries, on and off campus, and where we need to go to serve better everyone who logs on to www.wmich.edu/library/ or walks through our doors. At the same time, consider this issue a call to action, whether you consider yourself a digital pioneer, a digital immigrant, or a digital naif. Consider how you will participate on our journey into the future as a member of our extended community.

Living in "interesting times"
The apocryphal Chinese curse "may you live in interesting times" applies readily to our current status. Although we could certainly debate how much the pace of technological change has increased over the past several years, we all agree that the ways in which people are making use of new developments continue to be "simply dizzying"—even dazzling. No matter who we are, when we were born, or what we do, technology tremendously influences how each one of us learns, teaches, communicates, works, plays, and lives every day. What we get for our computing dollar continues to expand each successive year, and our expectations of what we can do with computers heighten accordingly. More and more organizations are making significant investments in digitally preserving and presenting all manner of data and information from numerous disciplines. Scholarly practice and communication patterns now include community-driven e-archives. The Web and other user-friendly interfaces have cemented the Internet commodity front and center. Through technology, millions of people around the world interact synchronously and asynchronously. Most current and future students, who, incidentally, are also tomorrow’s faculty, don’t remember what life was like before personal computers, cell phones, and the Web. Technology is increasingly the foundation of how we do everything we do. There’s literally a source for just about any information need or want.

Where’s the future library?
To begin, let’s frame that key question by saying that a library is first and foremost a service organization, which explains why an organization chart of WMU includes the University Libraries as an academic service. Our mission has two parts:
1. provide the University community with the information or resources that they need to learn and teach, and
2. support WMU’s mission to be a "dynamic, student-centered research university...focused on delivering high-quality undergraduate instruction, advancing its growing graduate division, and fostering significant research activities."

Easily stated, but to meet these goals, a library must motivate its users to tell us what they need. We need to know what our faculty, staff, students, and community users specifically need. And, assuming we do discover their needs, how do we get them to tell us again, and again, and again, as those needs change? Fortunately, the University Libraries is in the forefront of user analysis in that we have just completed a second University-wide, nationally validated survey called LibQUAL. In addition, we implemented focus groups and Web usability studies with students, faculty, and staff that ask specific questions about their experience as library users. We are also looking at statistics and other data that we and our computers capture, and are beginning to analyze what “users are using.”

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unit in the Libraries to make what we already have, as well as what we continue to acquire, available in the easiest possible way. Every day, our Technical Services staff adds significant amounts of data to our WestCat, WMU, or at a distant site any place in the easiest possible way. Every day, our Technical Services unit in the Libraries to make what we have, as well as what we continue adding significant amounts of data to our WMU Libraries' terminals.

The technological foundation

As described in an earlier Gatherings ("The Systems Sustains," Winter 2003, No. 32, pp. 2-4), the personnel found in an office suite on the lower level of Waldo Library install, maintain, back up, and replace the various library servers on which Technical Services, AND all other library operations place their handcrafted data about every library function. The systems staff works with partners in WMU's Office of Information Technology and elsewhere to help provide multiple other client servers that comprise an infrastructure that allows our users to perform what seems to be an unlimited number of tasks, e.g., place and remove items from our collection (and other sources) on individual class reserve or borrow items from outside our collection from other libraries, to name only two of many.

Although it may not occur to most who use our systems, these key staff members also provide technical support to some 400 desktop and laptop computers at five different physical locations. In particular, this includes all of our public access computers on which students, staff, faculty, and community users increasingly rely. And, our diverse users not only seek information, but to synthesize what they find into their class assignments, their faculty research and instructional preparation, their ongoing work needs; and any other demand that the user brings to the WMU Libraries' terminals.

A special assignment relates to Systems' maintenance and troubleshoot-
Global Connections—Online!

By Maira Bundza, Central Reference Librarian

Recently, I found a Michigan library-planning document from 1995 that predicted global access to data by 2014—two decades in the future. The reality is that, in less than a decade, the library world has changed so dramatically that it is hard to keep up with the transition from traditional card catalogs and print indexes to public online catalogs and indexes, full text journal articles, and a vast array of electronic full text books. Obviously, few foretold how quickly we were going to be globally connected through the Internet.

The work of librarians has also changed dramatically because of the tremendous increase in the availability of electronic information retrieval. At WMU in 1985, a popular database called InfoTrac was the first licensed, computerized index that became available to the WMU library patrons on the then, cutting-edge technology: a CD ROM. Although it was considered an amazing resource at the time, it covered just a few years and a few magazines and journals when compared to today's extensive databases. In reality, we couldn't begin to imagine what it was going to be like to have hundreds of catalogs and printed indexes available "on screen" through the magic of our fingertips—and at the fingertips of every professor and student. We also could not begin to envision the almost unlimited amount of information, the full texts of books, journal and newspaper articles, government and research reports, graphics, etc. that were going to become available to our library users without setting foot in the physical library.

Let me describe two or three current online databases that illustrate how much the boundaries of information retrieval have broadened in only a few years. One such example is an online index to the content of theses and dissertations, one of the most valuable resources for serious research in all fields, especially for graduate students and faculty. Historically, Dissertation Abstracts International was the key printed tool whose volumes filled many shelves in Waldo Library. Researchers had to search multiple volumes, by hand, to locate, at best, a brief abstract. To read the entire dissertation involved borrowing from the original library or purchasing a copy from the compiler of DAI.

Fortunately, and early in the international database development process, UMI and its partner company ProQuest started offering Dissertation Abstracts online, which made searching easier and more efficient. The official title in 2007 is ProQuest Dissertations & Theses (PQTD) and access is from the University Libraries' main screen under D, i.e., Dissertations and Theses (ProQuest). Researchers can search by topic (and several other ways) through 2.3 million dissertations over many years at once, and retrieve more dissertations because the keyword search can include all the words in the abstract. What really opened up accessibility was when, in 1997, UMI moved from microfilm copies to digital images of the dissertations. Today, ProQuest Dissertations & Theses not only offers an index to dissertations produced around the world since 1861, but also the full text of thousands of those dissertations. A researcher can download the full text dissertations to his or her computer, peruse them at leisure, and print out pages that are relevant to his or her research.

Much as librarians would like to simplify access to all print and online catalogs and databases, there is no Google approach or federated across multiple databases search process available on our Libraries' home page. As a result, we have to teach effective searching skills and ways to discern or select which of the many online tools to use. We still describe the online library catalog, WestCat, as analogous to the old card catalog; this resource may be used mostly for searching books, but it also provides many links to online sources of all types as well as the Libraries' holdings across all collections and formats.

Our Journal Finder replaces the historical serial lists, and more recent databases for finding what journals, magazines, and newspapers we own, either in print or online. Plus, among the 300 other databases accessible from our home page, there are dozens of indexes to articles in various fields of study as well as sources of information about companies, statistics, biographies, archival material, images, sound recordings and much more.

Having said all that, the bottom line is that there is no single answer to "connecting well." In lieu of a perfect solution, we decided that teaching one excellent database index would be a good approach to "opening up" our Libraries. We have chosen to use ProQuest Research Library, an online "periodical index," with freshmen students in the English 1050 introductory library instruction classes. This well-designed "general" index covers a wide range of subject areas and indexes over 3,800 periodical publications. This means that, regardless of topics, most students get hits with a simple search. In addition, ProQuest provides different wordings for topics, and gives suggestions for ways to narrow down the topic. The resulting list of publications includes scholarly journals, magazines, trade publications, and newspapers. Another valuable aspect of this ProQuest product is that two thirds of the publications are available online in full text, so the student can click on a link and get the actual text of the article ASAP. If there is no full text link, the student can still find the article by clicking on the "Find it @ WMU" button.

"Find it @ WMU" is one of the most useful electronic innovations we have offered our users in the last couple of years. "Find it @ WMU" is actually a program called SFX that allows for interconnections between library owned resources. We purchase full text journals from many different companies and these companies have moved towards a standard way of creating Web links to their articles. SFX is a "link resolver" that looks for all the sources for a journal, including a record in our library catalog, and presents those options to the user. The user then clicks on a link to the full text of the article, or to the catalog to find a call number for the printed version of the journal. If these options are not available, s/he can click into our Interlibrary Loan system and order the article, which will be delivered through e-mail.

To students, faculty, and almost all users, the Libraries' online databases and indexes not only blur together, but also seem to be hidden from the casual examiner of our Libraries' Web site at http://www.wmich.edu/library/. Once found, search screens appear complex since users have become comfortable with the ease of typing a phrase or a question into Google or other search engine. And, quick searches with terms used in Google soon convince them that the Libraries' "engines" don't work well. As a result, the companies creating these library research databases are continually improving their search interfaces: to be easier to use, to be more intuitive, to help the researcher along, and, although we hate to say it, to be more like Google. Some are trying to help with spelling suggestions. Others suggest subject terms to use. WorldCat, a massive database of over 62 million records of books and other materials held in libraries throughout the world, ranks its results by the number of libraries owning a certain item, hoping that will give more relevant results than an alphabetic or chronological list.

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As much as librarians tend to believe that students and faculty are more in need of help when we are sitting at a library desk ready to give it, the reality is that our users prefer to get answers when they need them, not when our service points are open and available. As a result, 24/7 or "any time access," to the Libraries' Web site is essential to deliver the help and assistance that students need when they need it. One project that the University Libraries has undertaken, in this vein, involves the production of instructional videos to help students access and navigate electronic resources, databases, and services.

These instructional videos are sometimes called "screencasts." And, if they are formatted to be played on a handheld iPod type device, they are called "podcasts." Basically, what we are talking about is a recording of computer screen output accompanied by audio narration. The completed product is usually published as a video file and is a sort of tutorial or virtual demonstration of some computer based activity. Screencasts have become popular in the business world as a way to provide employee training on software and automated systems. In recent years, libraries have started incorporating screencasts on their websites either to enhance in-person instruction sessions or to provide help to patrons on additional topics.

Besides the obvious "expand our presence" reason noted above, there are other reasons why the University Libraries has been motivated to produce Web videos. First, students and faculty need help when searching the Libraries' databases and resources. Different vendors offer different search strategies and what works for one search may not work for another search in a different database. Second, users need that help when and where they are working. Third, we constantly look for ways to promote and make users aware of the many, many resources available at the Libraries. Fourth, we have increasing numbers of distance and non-traditional students who cannot easily travel to Kalamazoo to get help in person. And finally, text-based help systems can be difficult for some people to use, especially younger patrons who are used to a variety of media. Learning styles differ; different users prefer different kinds of media, e.g. sound, text, images, animation, etc. Therefore, Web videos seemed an excellent way to reach out to our users.

In a competitive business market, various software packages were available for creating Web videos. After investigating several of them, we settled on a product called Camtasia, available through TechSmith. Next, we selected several databases and electronic services that our statistics indicated were heavily used by students. We also selected indexes that we knew required instructions if the users were to make the best use of all their respective features, e.g., Scopus, a large database indexing scholarly journals in the sciences and social sciences. Using Camtasia, we recorded scripted movies demonstrating features of these databases. We designed our screencast tutorials with slow pacing and progressive tasks. These considerations allowed users to follow along with the tutorials. Our screencasts also contained added pauses and buttons that prompted users to control the flow of the tutorial and facilitated active responding. Research has shown that this kind of interactivity in Web based demonstrations helps the user to retain what s/he is learning. The videos were designed so that the user could be using them in one window, while simultaneously doing whatever activity was being demonstrated in another window. The end result is a series of short, targeted videos that do not require the user to invest a lot of time; typically the videos are one to two minutes long and focus on very specific tasks or features.

We have found that using the Web videos has many advantages for our users and us. Videos expand the presence of the University Libraries and instructional support beyond the physical library. The student in a WMU residence hall or hundreds of miles away from campus can get help. The videos are interactive, controllable, and repeatable, so a user can go through them as many times as needed as well as paused along the way. For some databases, we have several videos so the student can go through all of them to get an overall background on the use of that database, or a user can choose just one or two to help with a particular feature that needs to be understood. Screencasts-make use of multiple media (sound, text, animation, etc.) that appeal to younger users who are comfortable and familiar with video learning. Web based videos are anonymous and easily accessible; no one needs to know that you are asking for help, which appeals to students who have issues with "library anxiety" or hesitate to ask for help in person. The videos provide reinforcement for library skills taught in person and extra practice for those who are still uncomfortable with navigating resources or using new skills. They also make it possible to teach more advanced skills that may only be of interest to a small segment of our users and which we do not have time to cover in a typical instruction session. Once they are created, Web videos can easily be embedded into Web based classes to provide true "point of need" help to distance students and others taking online classes.

At the present time, the Libraries' Web site [www.wmich.edu/library/] has more than 35 videos available. We have been tracking their use and have a very short survey that appears at the end of the video for users to leave comments. Many of the videos have been used over 500 times in the past several months. Users who have left comments have told us that they found the videos helpful and that they would use this form of help again. One user commented: "Great addition guys! Visual instruction is so much easier to retain then simply reading it and trying to apply it."

To check out WMU's library video guides, click on How-to Videos on the Libraries' Web site. The "Getting Started Screen" will list multiple headings:

- Interlibrary Loan (borrowing books and journal articles from other libraries);
- RefWorks (a citation system);
- ERIC (an index to resources on education);
- ISI Web of Science (an index to the sciences, social sciences, and humanities);
- SCOPUS (an index to many disciplines);
- Applied Science & Technology Abstracts (ASTA); and
- World of Engineering Information, which includes an Introduction to Peer-Reviewed Journals and an Introduction to Trade Magazines.

In addition, each of these headings, once opened, lists several short titles related to the larger heading. ERIC, for example, has videos on Introduction and Basic Searching, Searching by Document Type, Searching by Databases, Finding Research-based Material, Examining Search Results, Managing Search Results, Printing Full-text Documents as well as other options. The ISI Web of Science offers three videos: Introduction and Basic Searching, Limiting Search Results, and Journal Citation Reports.

Future plans include more evaluation via usage statistics, questionnaires and usability studies. We hope to incorporate more live action video, for example, videos of in-person instruction sessions, into WebCT, the system the library uses for delivering online classes. We expect to reformate the videos into podcasts so users can download them to be played on their iPod devices. When this is completed, we can put the library videos into the database of podcasts the University is developing as part of the "iTunes U" project. Each of these expanded video products, available because of wireless technology, clearly breaks down existing walls of the physical Libraries and provides a real presence to our users, any time, anywhere.
Banners Catch and Teach

By Michael Whang, Web & Internet Services

WMU's 21st century library must assure that electronic resources and services are always available—anytime and anywhere for the University community. Without question, today's technology is the foundation for access to high quality content readily linked from the University Libraries' home page at www.wmich.edu/library. But, how can this particular academic library position its licensed databases and catalogs against tough public Internet competitors such as Google, Scirus, Vivissimo, and numerous other search engines? How can we position OUR Web site as the first stop on the road to quality research, teaching, and learning?

Marketing is Essential

In a recent Gatherings article, "To Market, to Market: Selling Libraries," Brad Dennis, then Chair of the Libraries' Marketing Committee, presented a shift in thinking that many libraries have not fully embraced. Dennis says "selling libraries has become not only a goal, but also an essential key to survival in the 21st century world" (Gatherings, No. 38, Summer 2006, p. 4). In recent years, the staff of the University Libraries has identified strengths, weaknesses, threats, and opportunities. Out of their brainstorming efforts has come a new theme, to wit: the discovery and awareness of the Libraries' materials and collections by the community that it serves.

In 2003, an initial survey of users taught the Marketing Committee that shotgun newspaper notices and general articles were not effective at reaching target audiences. Another piece of information came from a more recent survey of students. According to 79% of the population surveyed, students preferred to visit the Libraries’ homepage to learn about new information or services available to them.

In response to this information, the Libraries' Web Office decided that online banner advertisements, displayed prominently on the Libraries' Web site, should feature library collections and services. The concept behind the development and implementation of our online banner ads is simple: promote "discovery and awareness" of the Libraries by using banner ads to tell our story. And, as a secondary benefit, the banner ads do a lot of the marketing and behind-the-scenes data gathering for us; we know who is looking at our ads and how they follow through. Moreover, data are collected 24/7 and help us measure success.

Discovery and Awareness

Because electronic resources and services provide patrons with 24/7 access to library materials found nowhere else on the Internet, the Collection Development Committee selected outstanding databases and indexes that are available online from the sciences, social sciences, arts, and humanities to serve as the prototypes for the new campaign. Several popular library services were added to the campaign including the Ask a Librarian online reference service, renewing books online, recommending items for purchase (books and DVDs), and screencasts, which are described in an article, "Beyond Library Walls," found on page 4 in this issue of Gatherings. For each resource and service being promoted, a banner ad and a landing page, reached by clicking on "Details," were created to help tell the library story and promote the resource being "bannered."

A valuable first banner is a database called Scopus. This is a citation and abstracting database that has great appeal to students, researchers, and faculty alike. Scopus provides extensive interdisciplinary access to 14,000 peer-reviewed titles from more than 4,000 international publishers covering the life, health, physical, and social sciences. To catch the student’s eye, a colorful banner ad was created for Scopus on the Libraries home page, and when clicked, the Web site visitor is presented with a landing page that highlights the benefits of using Scopus. Web site visitors are also shown a snapshot of what the database looks like when opened. This graphic brands the database and provides a visual landmark for Web site visitors to identify when they return to search again. Selected landing pages have a link to a librarian-authored screen cast and, in this case, demonstrates how to use Scopus quickly and easily. Also, on every landing page, there is a link that is intended to produce a call to action from the user. Each banner ad and landing page is designed to funnel Web site visitors into clicking through to the promoted resource or service, a subtle call to action. We want patrons to become curious enough about Scopus that they do some exploring on their own—take Scopus for a test drive at its licensed Web site: http://www.wmich.edu/library/content/107/scopus.php.

Hold on, there’s more. Among the key “discover” databases is ProQuest Research Library, one of our general databases [http://www.wmich.edu/library/content/407/proquestRL.php]. This interdisciplinary index and abstracting resource also has a relatively easy to use search screen, but is often lost to our users among hundreds of other searchable databases available on our home page. As such, it was a prime candidate for a teachable moment, a banner ad. We used many of the same components that we used with Scopus—highlighting benefits of the ProQuest Research Library, a snapshot of the database, and a direct link to the database—but, we then added a couple of things to help bubble our content up to the surface.

First, we included a heading "Where is it on the Web site?" We like to think of the banner ads as the Web site visitor’s Sherpa, guiding people visually to the resource quickly and easily. Second, we compared ProQuest Research Library and Google, differentiating the breadth and depth of results by searching the two search engines. Under the heading “Why ProQuest instead of Google?” we actually do a search for “search engines and fraud” in ProQuest Research Library and then in Google. We show that ProQuest retrieves 43 articles and citations from a variety of high-quality trade publications, popular magazines, newspapers, and scholarly journals. On the other hand, Google retrieves over 1,250,000 items which means patrons will spend a lot more time surfing and wondering what to select instead of completing an assignment or moving on to their next task.

Positioning the Libraries

By marketing and promoting our collections and services, what we are really doing is bubbling all of our high quality collections and services up to the surface, making our content discoverable, usable, and accessible. Our goal is simple: provide the WMU community with subject content that facilitates quality teaching, research, and, ultimately, responsible, educated citizens of the world. To do this, we must market ourselves and our collections and position them against the giant data and information purveyors that dominate the public Internet without providing ways to, as was once noted, “separate the wheat from the chaff.” The University Libraries can provide the "wheat," but we must first "catch" the attention of and "teach" our community of learners and researchers.

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Spring Gathering of Friends

The Friends of the Western Michigan University Libraries held the Annual Meeting on April 18, 2007 in the Stewart Tower. The annual business meeting saw the presentation and election of the following officers and Board of the Friends of the University Libraries, Western Michigan University, 2007-2008.

OFFICERS
President: Dr. David Sheldon (2007-08)
Vice President: Mr. Warren Fritz (2007-08)
Secretary: Dr. Sharon Carlson (2007-09)

At-Large Board Members
Mr. Norm Jung (2007-10), Dr. Susan Steuer (2007-10), Ms. Beth Timmerman (2007-09), Mr. Greg Fitzgerald (2007-09)

University Libraries Representative
Mr. Randle Gedeon, Monographic Acquisitions Librarian

Continuing Officers and Board Members
Treasurer: Ms. Regina Buckner (2006-08)
Board Members: Dr. Tom Seiler (2005-08), Mr. Warren Fritz (2006-08), Dr. Kathleen Garland-Rike (2006-09), Mr. David Sheldon (2006-09)
University President Ex-Officio, Dr. John Dunn
Dean of Libraries Ex-Officio, Dr. Joseph G. Reish

Members and guests at the Annual Meeting were delighted to welcome Dr. Elaine Didier, Director of the Gerald R. Ford Presidential Library and Museum, who spoke on “National Treasure: The Gerald R. Ford Presidential Library.” Dr. Didier has outstanding credentials and experience in the library arena. Her current position makes good use of her outstanding organizational background in her work at the Ford Presidential Library and Museum, which is located in Ann Arbor and Grand Rapids. “With the power of two, we dedicate ourselves to preserving and making available to the public, the historical records and artifacts of the Ford presidency.”

Dr. Didier enthralled the Friends with her descriptions of the two collections. The Ford Presidential Library in Ann Arbor has the more traditional “library” collection with “millions” of documents and media including films, sound recordings, photographs, and programs. In Grand Rapids, visitors find extensive exhibits and his entire career on display. Of course, recent events surrounding his death and burial in the site that he chose have brought additional attention to the museum. Dr. Didier demonstrated what President Ford once noted: “I want a living, educational institution that will provide inspiration for generations. The finest tribute of all will be to see the Gerald R. Ford Library and Museum living and growing and constructive and useful.”

Because there is really no end to the “global connections” to databases, there is much more available than already suggested. The University Libraries has not only been purchasing full text articles online, but also (1) electronic books (e.g., eBrary), (2) digitized archival materials (e.g., American Civil War: Letters & Diaries), (3) image collections (e.g., ARTstor), (4) music collections (e.g., Naxos Music Library), and we even have our first (5) video collection (Theater in Video) with definitive performances of major plays. You can find these examples and others through our A-Z listing of databases as well as in subject guides. Most of these are available any place our students and faculty may be—if an Internet connection is available. If they are studying abroad, or on a sabbatical, or at a conference anywhere in the world, they can still be connected electronically with all the resources we have to offer.

What a great time to be a librarian!  
What a great time to be a student or scholar!

Gatherings

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