SURPRISING STATISTICS

What’s the Question? Inquiry-based Learning in Library Instruction

Sara Miller, Assistant Library Instruction Coordinator

“Can you help me? I’ve written my paper, but I need to find three scholarly articles to back up what I said.”

Questions like this from anxious students are common at the reference desk the night before a paper is due. Recently, more instructors are designing assignments to move students away from ‘plugging in’ outside material as an afterthought, and toward interacting with sources through the entire writing process. In first year writing classes at MSU, the method of choice is inquiry-based learning.

Inquiry-based learning encourages students to ask and respond to questions—to understand themselves as part of an ongoing conversation about a subject. Many of us learned to think of a research paper as a report on a topic: an exercise in compiling and summarizing outside sources. With the inquiry-based model, students develop questions and pursue them, engaging in an active exchange with their sources. Inquiry stimulates students to create new knowledge instead of recounting what’s already known. Along the way, they hone critical and analytical thinking skills: major elements of MSU’s Liberal Learning Goals for undergraduate education.

Look for the rest of our FY2010 statistical highlights throughout this issue of Insight.

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Greetings Friends of the MSU Libraries,

Despite a challenging budgetary situation at MSU, we’ve made substantial progress on several important initiatives, with more to come.

First, our efforts to establish the East Wing as a quiet study area have been greatly advanced with the installation of 291 new individual study carrels. These workspaces are wired for electricity and Internet access, and provide a wider desk surface to accommodate the laptops and other devices students often use in conjunction with print resources. We plan to upgrade the balance of the East Wing during the next fiscal year. The resulting all-single-carel seating environment will go a long way to encourage the quiet atmosphere needed for private study.

Library instruction space was expanded with a new state-of-the-art Voice Library, which means that we also have an enormous volume of sound files in a matter of minutes. MSU’s digital collections created from our loan backlog come to about 30 feet of shelving—or the equivalent of 700 shelf feet of hard copy. The long-term safety of our digital assets depends partly on secure storage: servers being monitored 24/7 and backed up in multiple locations.

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As we look forward, one of the most exciting developments for the 2011-12 school year will be our purchase of an Espresso Book Machine, which produces bound books from electronic files in a matter of minutes. MSU’s installation will be only the second in the entire state of Michigan, and promises to provide many new, unimagined ways for us to serve the MSU community. We invite you to visit and see this amazing machine, which is scheduled for delivery in late June.

The MSU library staff work tirelessly to respond to the many and varied needs of our users. Enhancements to our physical environment like the ones described here are doubly important: they make the library more welcoming for our students, and they serve as a visible sign that the MSU Libraries continue to advance, despite difficult budgetary times. Thank you for your support, which makes many of these advancements possible.

Sincerely,

Clifford H. Haka

Director of Libraries

Digital Curation

While many digital collections are purchased or licensed from outside sources, the library also creates online archives to share with the rest of the world. Most recently, the Digital Information Division worked with the School of Journalism to digitize 5000 pages from historic issues of the Chicago Tribune, which pioneered color photography in journalism.

Altogether, in the past twelve years, the library has created more than 23 gigabytes of data. A gigabyte is equal to about 30 feet of shelving—or the amount of paper you could stack in the bed of a pickup truck!

“As Digital Curation Librarian, a great deal of my work is systems analysis,” says Aaron Collie. He is responsible for the continued ‘well being’ of the library’s digital assets. For many libraries, these are limited to text and images, but the presence of the Vincent Voice Library means that we also have an enormous volume of sound files.

By itself, digital information is nothing new to the MSU Libraries. The online catalog went live in 1999; we received our first grant to digitize rare holdings in 1999; by 2009, electronic materials accounted for 60% of our acquisitions budget.

But the prevalence of digital information has created important new specialties in librarianship. In some cases these are entirely new roles; in others, what had been secondary duties have become a library’s primary responsibility.

Aaron Collie, Lucas Mak, and Hailey Mooney are three of our front-line experts in this growing field. All are part of the Libraries’ Digital Information Division, headed by Shawn Nicholson, and their areas of focus represent critically important functions in the digital information arena.

Digital collections created from our loan backlog come to about 30 feet of shelving—or the equivalent of 700 shelf feet of hard copy.

The long-term safety of our digital assets depends partly on secure storage: servers being monitored 24/7 and backed up in multiple locations. As storage technology advances, data is migrated to ever more efficient hardware. At the same time, Aaron pays close attention to the processes used to create digital archives. “Digitization work is complex, and with constant changes in technology, the actual processes keep changing, too. Part of my job is to analyze the policies and workflows which shape our digital collections throughout their lifecycle of academic interest. This means I work with each collection from the point of creation, ensuring it will be accessible as long as we want it.”

Metadata Lucas Mak is a cataloger specializing in metadata—the term the library world uses for the records that describe digital information resources.

“Originally, libraries used card catalogs to describe their collections. A very concise format was developed to hold the necessary information about a book on one card. Later, library catalogs were computerized so they could be searched quickly, but the architecture of the information didn’t change. We still recorded the same information about books and journals as we always had.

“Now that so much information is electronic in nature, we have to be much more comprehensive in how we describe an information resource. We can’t just say what the thing is about—global warming, or Brazilian music, or geometry. What software do you need to see or hear the file? Are there copyright restrictions? Was the material originally created online or is it converted from printed books or analog sound?--continues on p.10

Digital collections

Managing author: Theresa Moore

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MSU is an affirmative-action, equal-opportunity employer.
It’s 2:30 in the morning and your paper is only half done. Your eyes are gritty, you need more coffee, and worst of all, you really need another source to back up your argument…

Whenever librarians talk about 24/7 reference service, this is the image that flashes to mind: the desperate, miserable student struggling to finish an assignment that’s due in a few hours…and should have been started weeks ago.

And yes, there are always a few young people learning the perils of procrastination among our late-night users. But the real surprise is that round-the-clock online reference services actually attract users all day long, as well as all night.

“Virtual reference service is great for students, not only because they can get help anytime, but from wherever they are,” said Christine Tobias, the library’s virtual reference coordinator. “They can be in the residence hall, at an internship, on study abroad. We even get questions from within the building, which makes perfect sense if you think about it.

“They’re studying, they’ve got books and papers and a laptop all spread out—if they can ask a question online, they don’t have to move. They can multitask while the librarian is working on their question. And frankly, if they use the online service instead of calling the Reference desk on their cell phone, then it’s not a distraction to other students working nearby.”

The library is part of two cooperative virtual reference groups: the Michigan-based Research Help Now, and QuestionPoint, a global reference network. Joining a cooperative is the most effective way to provide all-hours reference: it allows member libraries to pool their resources, especially helpful for night and weekend hours. “There aren’t that many students writing their papers at 3:00 in the morning,” Tobias said with a smile. “A dozen librarians across the country can cover the late-night questions from three or four hundred university libraries.”

When librarians began to experiment with virtual reference a decade ago, some were concerned to see resources devoted to a service they thought would only be able to handle simple informational questions—library hours, phone number look-ups, and the like. But technology allows librarian and user to interact and exchange information so easily, Tobias explained, that research needs can be handled with great success. In fact, the majority of questions allow librarians to demonstrate resources which students can then use independently.

“With virtual reference, we’re providing excellent service to students who really might not have been able to use the library before. One of the most wonderful interactions I’ve had on virtual reference was with a non-traditional student, a mom who was finishing her degree in nursing. We spent 45 minutes online together while I showed her how to search for full-text articles. All the time we were working, she said, she had dinner in the oven and her three kids playing in the next room.

“She signed onto the service full of uncertainty, and signed off feeling confident. It made me so happy!”

In the last year, the Research Help Now cooperative has recognized three MSU librarians for excellence in their virtual reference interactions: Deborah Margolis, Ben Oberdick, and Christine Tobias. Congratulations to all three!
WOMEN ARTISTS IN SPECIAL COLLECTIONS

Special Collections is not only a wonderful place to learn about literature, but the visual arts as well. These three examples offer a small glimpse into the many possibilities for study in our rich holdings.

Margaret Weld

Botanical imagery was one of the earliest ‘acceptable’ themes for women artists, and during the Victorian era, artists like Anne Pratt and Agnes Catlow were recognized as accomplished illustrators.

However, more than a century earlier, the work of Margaret Weld was almost unknown outside her family. Her unique manuscript, Painted Flowers is one of our most treasured works of art. The volume consists of 53 leaves of vellum with brilliantly colored paintings of lilies, tulips, and other flowering plants.

Only a little is known about Margaret Weld. She was the daughter of Sir James Simeon, the Baronet of Chilworth, and in 1701 she married Humphrey Weld of Lulworth Castle in Dorset. She had four children: Edward, Thomas, Mary and Elizabeth. In addition to Painted Flowers, her artistic talents are preserved in an engraving held by National Archives of the United Kingdom: “Lulworth Castle, the seat of Humphrey Weld, delineated by his wife Margaret Weld.” She died in 1737, but the volume of her paintings must have been a cherished family heirloom for generations. The MSU Libraries received it in 1972 as a gift from Gladys Olds Anderson.

Kate Greenaway

Kate Greenaway’s delicate images of idyllic childhood gained a wide audience in the 1870s and 1880s. Greenaway’s early illustrations were for magazines and greeting cards, but in 1870 she received a commission to illustrate a volume of fairy tales, and her career took off. In the next decade, Greenaway produced illustrations for more than 30 children’s books.

In 1878, Greenaway realized one of her fondest ambitions, to publish a book based on her own childhood memories. Under the Window combined simple verses with her signature depictions of children at play in the English countryside. She went on to publish five other books and many smaller pieces such as the Almanacks shown here. Her style was often imitated, and her pictures were so popular that they were even pirated, appearing on tableware and other products without her permission.

Special Collections has a fine selection of Kate Greenaway’s significant works, including Under the Window, Language of Flowers, and Marigold Garden. Most recently, we were pleased to acquire a complete set of the Kate Greenaway Almanacks (published 1883 to 1895, with a final volume in 1897) with funds from the Patricia Anderson Endowment for Children’s Literature.

Julie Chen

The melding of literary and sculptural elements is the essence of the artist’s book. This is richly demonstrated in Julie Chen’s 2002 work The Veil, a response to the complex contemporary politics of the Middle East in the wake of 9/11. (See photo on p.12.)

Like many artist’s books, The Veil is not meant to be simply viewed, but held and manipulated by the reader—which visitors to Special Collections are warmly invited to do!

The Veil is an eccentrically-shaped volume, covered in plain bookcloth. But the somber-looking covers hide a complex, multilayered construction: a carousel book, which opens out 360 degrees to stand on its own. And—perhaps significantly—when the work is positioned to offer a full view of any one section, the others cannot be seen.

Julie Chen discovered the book arts in the 1980s, after completing a BA in sculpture and printmaking. Although the techniques of bookmaking were new to her—setting type by hand, sewing signatures, making cloth bindings—she already had a unique vision of the three-dimensional form. Chen established the Flying Fish Press in 1987 and teaches in the Book Art program at Mills College in Oakland, California.

“I am so enthused about the expansion of the library’s digital collections. I use digital materials in my research and teaching as much as possible, for both environmental and intellectual reasons. I find that students are still unaccustomed to the format, and unaware of the great potential in reading and working with digital scholarly and archival materials! So by using them, I not only am able to teach my subject, but also guide students into new ways of reading and working.”

Sandra Logan, Associate Professor of Renaissance Literature, MSU Department of English

Above: Michael Rodriguez, Collections Coordinator for the Humanities, compares volumes held in Special Collections with their digital versions in the database Early English Books Online.

Lower left: Margaret Weld, Painted Flowers, 1722. Below: Kate Greenaway, Almanack for 1890, Almanack for 1884, and Almanack for 1887.
What’s the Question?
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**Inquiry in the Library**

Where does the library come in? Inquiry and research go hand in hand, as students continuously respond to and interact with sources of information. With guidance, students also begin to question and understand how a given source contributes to the conversation surrounding the issue. The ability to evaluate (not simply locate) information is known as information literacy, or information fluency.

Our instruction librarians work intensively with first year writing classes. The process begins with an interactive session, led by a librarian, where we focus on engaging students with different types of information that are directly related to their research assignment.

The catalyst for research is often a familiar format: a newspaper article, blog post, video clip or photo. During the library session, students discuss the content and identify questions it raises for them. In groups, they begin exploring the topic more widely. As they discover popular and scholarly articles, encyclopedia entries, books, opinion pieces, primary sources, and websites, we create a list of criteria by which they can evaluate what they find. Students leave the session with a deeper understanding of the nature of information, along with better techniques for finding basic information.

At semester’s end, students are asked, “As a result of this class, have your research practices changed, and how?” The results are very positive:

- I do not throw in unnecessary facts to fill up a paper any longer.
- I can’t wait until the night before, anymore, to do a research paper.
- Before I only looked at research as looking up facts and dates. I never thought of interviewing someone as research.
- I am now willing to do more research because I have found ways to enjoy it.
- I now research for the purpose of finding ideas that I can feed off of—topics that are controversial and interesting.

As librarians, we are always thrilled to find that students are becoming more engaged with research! Inquiry-based learning is a natural complement to our goal of equipping students with the information fluency skills they need for academic and career success.

**RESEARCH REMIXED**

The traditional, dreaded persuasive research paper:

- Choose a controversial topic that interests you.
- Choose a side, develop a thesis statement, and detail your argument. Support your claims with five outside sources: two books and three scholarly articles.

An engaging, inquiry-based research assignment:

- You are writing an article, to be published in a popular magazine, about life in your major or field of study for other students who may be interested in pursuing your major. Look for a current issue that’s being discussed in your major. Use a variety of sources—an assortment of popular, scholarly, trade, or newspaper articles, an interview with a professor, other work that you have already done in the class, etc. to generate questions and to build a knowledge base.
- Along with your article, include a reflection on your research process.

**LIBRARIAN EXPERTISE: ACCEPT NO SUBSTITUTEs**

Last fall, Kirk Goldsberry and Ashton Shortridge had a problem. The National Research Council had just released a long awaited report with rankings of doctoral programs at more than 220 American research universities. Shortridge, Goldsberry, and the rest of MSU’s Geography faculty were appalled by the barely average score assigned to represent their program’s research productivity.

“The NRC assessment is very important and influential,” Goldsberry explained. “It’s one of our tools for recruiting the best graduate students and faculty to MSU. We couldn’t help but question the NRC’s conclusion.”

The two professors’ skepticism was more than Spartan pride. MSU’s Geography department is a powerhouse, with active research in the areas of geospatial technology, nature-society studies, urban-economic geography, climatology, geomorphology and soils, and plant geography, and with major projects funded by the National Institutes of Health, the National Science Foundation, and NASA.

Not to mention the intangible evidence. Goldsberry and Shortridge knew very well from conferences and other scholarly networks that MSU’s Geography program is highly respected by their peers.

The problem was the source of the National Research Council’s data: the notoriously complex and unwieldy Web of Science database, which tracks how many times scholarly articles are cited by later researchers. Its basic principle is much like a Google search: important work will be cited many times, while articles that make only a slight contribution to a field will be more or less forgotten.

That’s where Geosciences Librarian Kathleen Weessies came into the picture.

“We came to Kathleen with an urgent request,” said Shortridge. “We suspected that the NRC assessment was based on a less-than-comprehensive search of the Web of Science database. We asked Kathleen to develop a rigorous search strategy that would identify every citation to research by MSU Geography faculty, all the way back to 1981. This was a multi-faceted challenge that required an indepth knowledge of our faculty’s research interests, how knowledge is organized in our field, and how to compensate for the Web of Science’s clunky interface.

“Kathleen’s work was crucial to the university’s response to NRC,” Goldsberry explained.

Kathleen’s work was crucial to the university’s response to NRC...

**Geosciences Librarian Kathleen Weessies in the Map Library.**

“Fortunately for us, Kathleen plays the Web of Science like Bach played the organ. She was able to recreate the NRC methodology and identify significant flaws. Within weeks we were able to produce an analysis of the NRC assessment, showing why and how it had fallen short.”

“The National Research Council project was an enormous undertaking,” Weessies explained. “One big problem with Web of Science is that there’s no unique identifier for an academic author, the way an individual has a Social Security number. Over the years, authors may use all sorts of variations on their own names—even adding or dropping a middle initial creates a separate ‘trail’ to follow. Or they might list MSU as their affiliation on some publications, and the organization that sponsored the research on others. With access to CVs and biographical profiles of department faculty, I was able to search Web of Science much more thoroughly and accurately. Knowing the database’s history, architecture and weaknesses made all the difference.”

“Kathleen’s work was crucial to the university’s response to NRC,” Shortridge concluded. “The analysis we produced will impact our entire discipline, calling us to examine the degree to which research quality can—and cannot—be accurately quantified.” As the academic year ends, Shortridge, Goldsberry and Weessies are preparing an article about NRC’s doctoral program assessments for a peer-reviewed journal.

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“Special Collections has been an unexpectedly rich resource for my studies with a deeper understanding of the nature of information, along with better techniques for finding basic information.

“Kathleen’s work was crucial to the university’s response to NRC.”

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**Lauren Harris, Professor of Cognition and Cognitive Neuroscience, MSU Department of Psychology**

Lauren Harris, Professor of Cognition and Cognitive Neuroscience, MSU Department of Psychology

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NEW FRONTIERS IN DIGITAL INFORMATION


Above: Deborah Margolis, Jewish Studies Librarian, with her exhibit "Interpreting the Interior: Israeli Writer and Filmmaker Etgar Keret.”

—continued from p. 3

“Make a catalog searchable, you have to enumerate all the possibilities for each data point and codify them. Without consistency in the data, it’s chaos!”

Data Services

“Numeric data files are the focus of my job,” explains Hailey Mooney. “Principally, that means social science data, but it can include material in the arts or hard sciences—as long as it can be analyzed statistically.”

Some of these resources are purchased or licensed from outside sources. “Many data sets, like the U.S. Census, are produced by government agencies, or maintained by nonprofit repositories like the Inter-University Consortium for Political and Social Research. Several librarians outside Digital Information work in this area too, especially our Government Documents librarian, Hui Hua Chua; the Geosciences librarian, Kathleen Weessies; and the staff in the Business library who work with financial and economic data.”

The rest of the time, Hailey is breaking new ground along with the rest of the Digital Information team, by creating services to support research data management. “This is a really new area for academic researchers. Because so much of their work is funded by the federal government, there’s an increasing expectation that data be collected in such a way that it can be shared with other researchers. That’s not as simple as it sounds, and creating good documentation is the tip of the iceberg! There are privacy issues, intellectual property issues, usability issues, and more.”

“Research data management is still an emerging field, and that’s very exciting. I have more research questions of my own than I can tackle all at once!”

Looking Ahead

The library’s Assistant Director for Digital Information, Shawn Nicholson, is responsible for the big picture. “As the digital evolution continues, each of these positions will be vitally important to the Library, as we continue to support the University’s mission of preservation, creation, transmission and application of knowledge. We especially look forward to collaborating with faculty on the curation of digital content and developing services to enhance learning, teaching, and research. We are so pleased to have these talented individuals to move the Library forward.”

NEW WAYS TO GIVE

Financial support for the Student Art Competition, a splendid new display case, generous gifts of rare books or endowments to purchase them—all are described within this issue of Insight. These are just a few of the ways that you, our supporters, enable the Libraries to grow.

Congress has re-authorized the provision that allows you to make a tax-free gift from your IRA to MSU, from now until December 31, 2011. If you will be 70½ or older in 2011 and do not need your withdrawals from your IRA, this is a new way for you to support our role in the MSU community.

For more detailed information, go to www.msu.planyourlegacy.org/ira.php, or contact us at any time with questions:

Seth Martin, Director of Development for Libraries, Computing and Technology, 517-884-6446.

In addition to article retrieval services, the library borrowed 30,024 items from other libraries for MSU users, and loaned 4,450 items to other libraries from our collection.

MARS: FASTER THAN COMING TO THE LIBRARY

Beginning in September, the MSU Libraries piloted a new service for faculty and graduate students: MARS, the MSU Article Retrieval Service.

“Many of our faculty and grad students are incredibly pressed for time,” explained Denise Forro, head of InterLibrary Services, the unit that runs MARS. “Online access to library materials is something they’ve come to depend on. But not everything is online. There are still some journals that simply don’t publish electronically, and many books as well.”

But good research can’t be limited by whether material is available online—so the Libraries came up with MARS. The service provides faster access to books and journals that only exist in print.

At the MARS website, faculty and graduate students can request individual book chapters or journal articles. To comply with U.S. Copyright law, MARS can’t provide more than one chapter from a book or one article from each issue of a journal.

I-LI5 workers retrieve the volume from the library stacks, scan the desired material, and email it to the user.

Dr. Douglas Postels, from the Dept. of Ophthalmology and Neurology in the College of Medicine, is a satisfied customer. His hectic schedule combines teaching, research, and clinical work. “MARS works well for me. I research on pediatric neurologic issues in sub-Saharan Africa means that I must have access to information published in rather obscure medical journals, or in French. Some of these not available online, but the articles are delivered promptly to me by email.”

In the first eight months—Fall 2010 and Spring 2011 semesters—more than 2200 requests have been filled. “Our numbers are rising steadily,” Forro reported. “That tells us MARS is a service our faculty and graduate students need, and want.”

The Libraries recently received the generous gift of a beautiful, secure display case from Barbara Sawyer-Koch, MSU Trustee emerita, and Donald F. Koch, MSU professor emeritus. The case is located in the Main Library lobby and will be used to exhibit materials from Special Collections. We greatly appreciate the opportunity to make our rare books more visible in a high-traffic location!
Special Collection recently acquired a copy of the Codex Borgia, a limited edition facsimile of an Aztec manuscript.

The essence of an artists’ book is the melding of literary and sculptural elements—a creative interaction between two very different ways of communicating. Special Collections has more than 300 examples of this emerging genre. Many have been purchased in recent years to support the Book Arts concentration in MSU’s Residential College in the Arts and Humanities, which opened in 2007.

On page 6, learn more about women artists in Special Collections.

Above: The Veil (2002), an artists’ book by Julie Chen, held in Special Collections.