

Kagaku Forum (Science Forum), 2012 (2)

University Libraries are Changing to Encourage More Student Use

Hiroyuki Nagahashi Good
Librarian
University of Pittsburgh

How Do You Use the Libraries?

How would you answer if asked, “How many times did you go to the library last semester?” Would you say more than ten times you went (around once a week), or not at all? We often hear students saying “I can use learning apps on my cell phone, and do the readings online.” We librarians have struggled with the increasing numbers of students “unwilling to visit the libraries on campus.”

Dramatic decrease of users in reference services is a trend observed all around the world. At Hillman Library of University of Pittsburgh (hereafter Pitt), where I work, there has been a sharp drop in usage of reference services in the recent years. Rather than talking with students face to face at the library, we librarians provide virtual referencing, answering questions over emails and instant messaging. Some university libraries in the United States have even abandoned reference services.



Picture 1: “Cathedral of Learning,” the tallest university building in the United States and a symbol of Pitt.



Picture 2: Dinosaur *Carnegie* at Carnegie Museum of Natural History is the idol of Oakland, where Pitt’s main campus is located.

While a queue for asking questions to librarians disappeared, there are increasing numbers of students who use libraries as their study rooms, to write papers, and to hold group meetings. Hillman Library is open most of the days except special holidays (for example, during the fall semester in 2011, it was open until 2am from Sunday to Thursday, and until 10pm on Fridays and Saturdays). The library remains open for 24 hours during the week before final exams and the week of finals. As finals approach, the Hillman Library becomes so crowded that it is hard to find an open desk even late at night. The library offers desks with outlets as well as wi-fi. There is also a computer lab with printers (free printing up to 900 pages a semester for undergraduate students) and scanners. While computers (MacOS and Windows) are set on 1st, 3rd and 4th floors, Hillman Library also offers rental laptops. However, libraries are more than a building or a facility – the university library system is undergoing a change today so that students can make more use of information services, libraries’ most important function.

Are *Google* and *Yahoo!* Your First Options for Doing a Search?

One study found that when doing a search, over 90 percent of students first try *Google*, *Yahoo!*, or *bing*. What this study is telling us, is that if we could simplify the university libraries’ search

system, there would be more usage. The university library system at Pitt has introduced *Summon*, an integrated search system that aimed for such user-friendliness as we see in *Google*. *Summon* simply provides one search box on its front page.



Picture 3: New search system of Pitt library, now with one search box. You can also set Japanese as the screen language.

The word “*Summon*” means *to assemble*. The name connotes a call for desired information. *Summon* indexes and brings together not only the collection of books in the library, but also database, electronic books, electronic journals, collection of digitized, pictures and maps, academic information in open-access sites (i.e. provided for no costs and to anyone on the internet) and repository (electronic archives that collect PhD dissertations and scholarly articles). *Summon* calls the most relevant data from vast information source, according to words typed in the search box.

Pitt’s search system can be accessed from your mobile phone. You will be able to conduct a search and review the results, but downloading and reading Pitt’s electronic books or electronic journals is only allowed to those affiliated with the university.

As picture 3 shows, the search system of *Summon* can be set-up in Japanese. Search results appear in the original language of the resource, be it English or other languages. Because 28 percent of the collection at Pitt is in 30 languages other than English, the system allows the search to be narrowed down by different languages.

To demonstrate how a search can be conducted in *Summon*, let’s type in “Japanese DNA” in the search box. 113,720 results were found. To the left of the screen, you will find a column showing the types of results. For example, there are 3,293 books (print and electronic) as well as 89,392 articles that are immediately available online. Let’s further narrow down the results among these

articles. We will select Japanese from the list of languages. To my surprise, there were 928 articles published in Japanese academic journals. These articles are written in Japanese, but include titles and abstracts in English. Let's click one of the articles. The first article we see is "DNA Analysis Method for Detecting the Mixing of Foreign Species of Eel among Many *Anguilla Japonica* Eels," published in November 2011 in *Nippon Suisan Gakkaishi (Journal of The Japanese Society of Fisheries Science)*. The next article is "Genetic Diversity and Population Structure of *Jidori*, *Shokoku* and Its Related Breeds of Japanese Native Chicken Based on Microsatellite DNA Polymorphisms" published also in November in Tokyo University of Agriculture's *Journal of Agricultural Science*. Because these articles were found in free academic journal search engines such as J-Stage and CiNii, you can also download and read the entire article.

Next, let's type in "*Nichibei Kankei (Japan-US Relationship)*" in Japanese and do the search. Clicking the first title *Nuclear Non-Proliferation/Disarmament and Japan-US Relationship (kaku-fukakusan/kaku-gunshuku to Nichibei Kankei)* takes you to CiNii. Since this article is open-access, anyone can read the entire text. When you click the second title, *Okinawa in Japan-US Relationship (Nichibei Kankei no Naka no Okinawa)* by Masaaki Gabe, we jump to a journal page that the Pitt library subscribes to. This journal has not been digitized, but we can access a hard copy of this article found among magazine shelves on the fourth floor in Hillman. As these examples show, you can quickly find relevant resources for your papers from our website, without making an actual trip to the library.

A University Library with History Will Not Give Up, but Rather Make New Challenges

Pitt's main campus is located in Oakland, 5 km east of downtown Pittsburgh in Pennsylvania. Located in the center of academic district, Pitt is surrounded by a variety of research institutions and cultural facilities: Carnegie Mellon University, Carlow University, Chatham University, Carnegie Museum of Art and Natural History, Carnegie Music Hall, as well as the main branch of Carnegie Library of Pittsburgh. Pitt was founded in 1878 as a private institution, and became public in 1966 when the university began to receive funding from the state of Pennsylvania. It is a comprehensive university with more than 90 majors offered for undergraduate degrees, as well as over 200 graduate programs including those at medical and law schools. In particular, University of Pittsburgh Medical Center (UPMC) has ranked high among medical schools and hospitals in the United States, highly praised for its size of medical facilities, high level of medical services, and innovativeness. I've come across a line in Japanese drama where the character says "I've decided to study abroad at the University of Pittsburgh hospital." There are

indeed several residents from Japan working at UPMC.

The Cathedral of Learning is the highest academic building in the United States (about 160 meters high, 42 stories-high, with more than 2,000 rooms). It is so high that you can even see it from downtown Pittsburgh. On the opposite side from this high tower, across the intersection, is Hillman Library, Pitt's main library. Our university library system is ranked among the top 25 research universities in North America (university large enough to offer doctoral programs). Including branches and libraries at regional campuses, there are 23 libraries unified as the university Library System except for medical and law library. Our Director, Dr. Rush G. Miller is 64 and is an *ara-kan* director. Have you heard of *ara-sa* (shorthand for around-thirty) or *ara-fo* (around-forty)? He is one generation above, *ara-kan*, around *kanreki* (sixty in Japanese). Although he grew up without televisions and computers, Dr. Miller is always open to new technology and innovation, and is a perfect person to be the director of university libraries in the age of digitalization. He is always the first to purchase and try new devices once they come out in the market. For example, he's been a user of electronic book reader since the first generation. He broke one reader in a week, after trying out too many things on the machine.

One of the phrases that Dr. Miller often says is “technological advance overturns our prediction.” With this in mind, he makes the effort to create libraries more appropriate for the age of digitalization. New facilities and services, therefore, are introduced in our libraries every semester.



Picture 4: Rush G. Miller, PhD, the Director of University Library System at Pitt.

He gave a lecture on libraries' future in October last year in Japan

(photo: Masami Matsubayashi).

The on-going projects today include: a digital collection called *D-Scribe*, digital publishing efforts where the library functions as a publisher in issuing electronic journals, and a digital repository called *D-Scholarship*.

“D” of *D-Scribe* refers to both “digital” and “describe”. It is a digital collection of over 100,000 pieces of data, pictures, and images on more than 100 topics. The collection includes images of highly artistic and historical value, as well as maps, documents, and books from the 19th century, documenting the history of Pittsburgh. Also included in *D-Scribe* is a collection of *ukiyo-e*.

Digital publishing, where libraries not only subscribe to existing electronic journals but rather publish one, is the latest trend among university libraries in the United States. The library provides the platform and editing support while researchers provide the written articles, conduct peer reviews, and upload edited articles. Conditions for publication are to maintain open access and the quality suitable for academic journals. The library does not charge any fee for provision of servers or technical support. Fourteen electronic journals have been published by supportive researchers, and 10 more are to be issued soon.

D-scholarship is an open access electronic archive that students and researchers can self-register and accumulate master’s theses, dissertations, and research articles. At Pitt, we have registered articles that have already been published in academic journals in our repository and made them available for free on the internet. When submitting articles to academic journals, professors used to provide copyrights to publishers in order to increase the professors’ chances of getting published. There were cases where professors had to pay royalties to the publishers even if they wanted to use their own article in a class. In order to improve such situation, Pitt negotiated with major publishers, along with five universities including Harvard University. As a result, we are now able to register in our repository those articles whose copyrights belong to publishers.

Dr. Miller’s spirit of looking into the future sometimes does not lead to the result he may expect. With increasing number of electronic books coming out to the market, he once purchased a printing machine for electronic books. The machine was called “Espresso,” connoting that a book can be printed as quickly as one takes a break. Because the electronic book reader that he tried wasn’t easy to use, he thought that the library would need this machine for the next four to five years, until more user-friendly reader come out. Demand for “Espresso,” however, wasn’t high. While the new machine did capture people’s attention, what students wanted for their papers was not the entire electronic book but a chapter or even just a section of the book. It was

easier for the students to just read on the screen or to download and print the sections in computer labs. The on-demand printer for electronic books has now been relocated to University of Pittsburgh Press. In Japan, the same machine can be found at the Jinbocho Main Store of *Sanseido Shoten*, a well-established bookstore of publishing culture.

Librarians are Coming Out of Library Buildings

What are the new roles of librarians at university libraries in the age of digitalization?

In many American universities, students may begin their respective programs each semester¹. Most universities offer classes in semesters (about 16 weeks) or quarters (about 12 weeks). At Pitt, the libraries offer guidance for incoming students each semester. We explain what's where in each floor (how to use the search system, where the computer lab is located, how students can use meeting rooms) as well as general usage of libraries (how to rent a laptop, how to print out materials).

After classes begin, we provide specific guidance on books and journals that might be useful for papers and projects as well as on how to use relevant databases. A professor might bring all the students to the library, or the librarians may visit the class. We librarians do not wait for students to come to our reference desk, but rather go and visit the students ourselves. We want to build a trust so that students feel free to email librarians or to come visit us.

Once you enter university, there will be more and more opportunities to write papers for classes. What makes your paper high quality? In American universities, a good paper is one written from the perspective of critical thinking. A direct translation of critical thinking would be to “think critically (*hihan teki ni kangaeru koto*),” but it does not mean you elaborate opposing or criticizing opinions. It is a difficult notion to translate in Japanese, but imagine a paper where you write what the past studies have found and what you think about the topic. In the process, it is important to go through as many articles as possible on the topic, be it in favor or opposing to certain positions. One of the original roles of librarians is to provide specific advice on how one should choose paper topics and what kinds of resources one should look for.

We librarians and professors discuss about student assignments and potential projects before semesters begin. Based on the discussion, we provide a website that lists useful database and

¹In Japan, students are usually allowed to begin their program only in April.

suggested ways of obtaining resources, using new software like *Lib-Guides*, so that students can understand the lecture well and write good papers. Cherishing relationships among students and professors is the priority of university libraries in the age of informatization and technological advance.

Reference

Search System of the University Library System at the University of Pittsburgh:

<http://pitt.summon.serialssolutions.com/>

Espresso Machine/*Sanseido Shoten* On-Demand

http://www.books-sanseido.co.jp/event/promo_20110620.html