



Proof of Concept: The Fatal First Click: How do we hook them once we've got them to look?

Kristine Ferry
Director of Web Services

Cynthia Johnson
Head of Reference

Cathy Palmer
Head of Education and Outreach

University of California, Irvine Libraries
Irvine, California, USA

Meeting: 74. **Information Literacy with Reference and information Services**

WORLD LIBRARY AND INFORMATION CONGRESS: 76TH IFLA GENERAL CONFERENCE AND ASSEMBLY
10-15 August 2010, Gothenburg, Sweden
<http://www.ifla.org/en/ifla76>

Abstract:

As the age of electronic information matures, library websites have emerged as primary service points that inform users of the services and resources available to them. Regardless of how rich the resources, how pleasing the graphic design, how easy the navigation, and how actively librarians promote the use of the website, the truth is that the majority of library websites serve simply as link providers, many of which are accompanied by explanatory text. In this paper, we will present a proof of concept that we can use to proactively entice and inform users about services and resources selected to meet their individual information needs. The proof of concept is built using information and tools that are readily available to any library. We will showcase examples of electronically mediated services with differing levels of ease of implementation.

Introduction

At the University of California, Irvine, our library buildings (three libraries and a study center) received nearly 8,100 visits a day in 2008/09; in contrast there were approximately 25,000 virtual visits a day to our website, (<http://libadmin.lib.uci.edu/planning/statistics/annual-report-2008-2009.pdf>). Library websites have emerged as primary service points that inform users of the

services and resources available to them. As librarians, we desperately hope that once users come to our library's website, they will comprehend its organization and purpose, and that they will have the patience, motivation, and tenacity to locate answers to the questions that brought them there in the first place. Although statistics can tell us how many visitors our sites attract and those numbers are high, our current passive sites rely heavily on an assumption that our patrons have a sophisticated understanding of information organization and the values that will motivate them to seek until they find.

As our digital collections grow and as users become more dependent on electronic access to data, meaningful organization and easy accessibility becomes increasingly important. We are hyper-aware of the growing importance of our virtual presence, and are actively exploring how to empower our patrons, making it as easy as possible for them to discover, access, and manipulate the information they need. We hope that by using the growing and variable types of data accessible to us, we can eradicate, or at least minimize, the inadvertent stumbling blocks that patrons must sometimes contend with in searching for information and using our services. We are also cognizant of our shrinking staffs and of the difficulty of maintaining drop-in reference assistance for all but the busiest times of the day. Even as we struggle to maintain some level of in-person assistance, the patrons who need assistance finding information or understanding how to use library-related services, such as Interlibrary Loan, are frequently not in the building when they need to ask questions. Consequently our reference services are adapting to a new, more virtual, environment. At UC Irvine we have developed a suite of reference services under the rubric "Ask a Librarian." In addition to traditional in-person reference, we provide digital reference through email and chat. These digital services capture the questions asked, the language used by the patrons, and the answers we provide. All of these services provide a wealth of information to help us move forward in creating websites and tools that can meet the patron's needs before she or he needs to ask a question.

In this paper, we present a proof of concept to demonstrate the feasibility of using readily available data, as well as easily recognized triggers that can signal a patron's difficulty accessing or finding information, to design static and dynamic electronic interventions that can be used to proactively entice and inform our users about services and resources selected to meet their individual information needs. "Proof of concept" is a phrase widely used in business and research endeavors. It refers to the use of evidence which demonstrates that a model or innovative approach is viable, feasible, and capable of solving or diminishing a particular problem.

Our paper showcases examples of electronically mediated services with differing levels of ease of implementation. We begin with highlighting improvements that we have already made to the University of California, Irvine Libraries' website and then move on to review services and interventions that we plan to implement in the near future. In some cases, we use what we have termed a static intervention. By this we mean that the patron is offered an option to take an action once they reach a certain place on our website. An example of a static intervention is our Ask a Library chat reference service widget which we have embedded in frequently used library web pages. In other cases, we use dynamic interventions that suggest options to the user based on available data. For example, we have written an algorithm that recognizes users who are accessing our site remotely and which offers the option of remote authentication based on this

recognition. The paper culminates with our concept of the “digital concierge,” which relies on a more complex analysis of available data to create algorithms that customize the user experience based on the initial query or link selection.

In all cases, careful analysis of data that is readily available to us and to other libraries determines and supports the choice of which services and interventions to provide. For example, we can analyze digital reference transcripts to discover what topics patrons frequently ask about. We can use Google Analytics to find out how patrons use our websites by tracking visits, page views, pages per visit, at which points users abandon the library site and jump to another activity, and average time on site. We can mine the searches done on our website, as well as reference transcripts, to determine the terms that patrons use to describe their information needs in order to incorporate and employ that language in our website to better identify the services and resources that they are looking for. Our ultimate goal in using the wealth of readily available information is to develop tools which make it easier for a patron to find what he or she wants, without necessitating in-person assistance, and to make it easy to invoke in-person assistance when the patron requests it.

Data and Mediation

Our digital reference transcripts have proven to be one of our most valuable data sources in helping us to determine where to improve our website. In Winter 2010, we looked at sixty-two virtual reference transcripts from a one-month period, about 20% of the total transcripts for that time period. (See Appendix A for a detailed analysis of the chat reference transcripts.) We then grouped the results by topic. This was a worthwhile exercise as the frequency of some questions surprised us. The top ten topics were:

1. How to find a Journal/Newspaper Article they found or were assigned in class.
2. Books—How to find, renew, place a hold, limit to how many you can check out.
3. How to access/log in to Library Resources/Databases from home- VPN Issues.
4. Community user services- Computer use/wireless/library card/loan rules/database use/parking/privileges for alumni/other UC off campus users.
5. How to start research on a specific topic, database knowledge was addressed.
6. ILL- How to log on- time frame of delivery.
7. 39 C How to find a bill on their specific topic. (39C is one of our campus’ undergraduate composition courses and the Libraries are actively involved in providing instruction and offering assistance to these students.)
8. Equipment usage at library- computers/microfilm for Community Users.
9. Access JSTOR database.

10. Location of books- Call number floor/map.

The top ten problem areas confirmed some topics that we already knew were problematic for our students and made us aware of others that we will address in the future. In some cases, we suspect we are getting the questions because of steps we've taken to provide more assistance. For example, the fact that we are seeing questions in our digital reference service about how to find articles and how to start research may be due to the initial placement of the chat reference widget. We chose to embed our "Ask a Librarian" chat widget on the 'Databases to Get You Started' page, which is easily found from the Libraries' home page, and is frequently shown to students in classes and at the reference desk.

The placement of the widget on this page makes it more visible to students, and hopefully encourages them to ask questions when they are starting their research. The fact that so many questions asked in digital reference are about how to begin research and how to find articles confirms that this was a good placement of the chat reference widget.

We implemented a more dynamic solution to assist patrons with remote access to our licensed resources. Anecdotal evidence told us that “How to access/log in to Library Resources/Databases from home- VPN Issues” was a serious issue for our users. Transcript analysis confirmed our impression and justified our decision to spend time and effort to look for solutions to make it easier for patrons to connect to our resources. To address this problem, we developed a script that checks a user’s IP address to quickly determine if a user is accessing our site from on or off-campus. We added the script to the Libraries’ ‘Find Online Resources’ page <<http://www.lib.uci.edu/research/eresources.html?tab=reference>> in an effort to help our users realize that they need to log in to the campus Virtual Private Network (VPN) to use these resources from off-campus. This script checks their IP address; if they are within the campus IP range, they can proceed with their search as usual. The VPN script appears only when a user is not already properly logged in to our Virtual Private Network, thus appearing only at point-of-need. If the user is accessing this page from off campus and is not already logged into the VPN, the pop-up box below appears. This method only assists those who do not have a pop-up blocker enabled in their web browser.



from UC Irvine Libraries web site (<http://www.lib.uci.edu/research/eresources.html>)

The user then has the choice to follow the link to log in to the Web VPN, after which they will be directed back to the initial search screen, or they can close the box. A cookie makes sure the pop-up box appears only once during their browser session.

In the Web VPN project mentioned above, we found that benchmarking acted as a helpful tool to demonstrate the efficacy of the intervention. Benchmarking is the practice of measuring performance relative to an established standard or baseline. In order to establish a baseline by which to measure our intervention, we did a review of our chat reference transcripts to see how many questions were asked about remote access to our licensed resources over a two week period before we began the project. Once the VPN script was in place, we did another transcript review after one month and again at six months to see if there was a difference in the number of questions we received. We discovered the number of questions steadily dropped over time. Before the project started 21% of the questions we received through our chat reference service were about logging into our licensed resources from off-campus. After the script had been in place for six months that number had dropped to 12%, which confirmed that our intervention was alleviating a known problem

Another script was created to track how many times the box popped up versus how many times people clicked ‘yes’ to be brought to the log in screen. Consistently, over the four month period that we’ve tracked so far, 33% of people click “yes” to be led to the log in screen. That is a significant amount of times we are making it easier for our users to get where they need to go. The work-ticket system that we use to track all web-based projects shows that this script took 13 hours to create, test and put into production. We decided that based on this data it was worth keeping the script in place and also adding it to the course and subject guides. We do not yet have any further data, but will do another benchmark study in a few months to see if the number of questions about remote access received through our Ask a Librarian chat reference service has been reduced even further.

We are also using a dynamic mediation method to make our library tutorials more accessible. In addition to providing access to the real-time chat reference service, we continue to look for solutions to help our patrons who have questions about finding articles and how to begin research. Like most libraries, we have created various library tutorials to assist students in these tasks, but we have struggled with how to connect the patrons with the tutorials. We are constantly trying to do this by improving our site search. One easy improvement was to give web pages descriptive and unique titles. A web page title like “library tutorial” might not appear prominently in the results if someone types in a query like “how do I research...” A better choice for the page title might be “Begin your research” or “Begin your research: library tutorial”. Another strategy was to use keywords often in the web page. We wanted to ensure that we used keywords and vocabulary that students understand and use themselves. One way to identify these keywords is through the transcript analysis mentioned above, and noting what words and language patrons use to describe what they are looking for, and how they describe the problems they are encountering. We have also tried using the Synonyms feature in Google Custom Search to improve search results. For example, our main library tutorial called “Begin Your Research” appears at the top of our search results if a user types in “begin research”. In the Google Custom Search interface, we added synonyms to “begin research” such as “find sources”, “assignment”, “research tips”, and “research help”. This had immediate results and typing in those terms made sure the tutorial appeared at the top of the results. However this solution is not the most scalable as the interface for Google Custom Search makes

this approach difficult to manage. We are currently exploring site maps and how they can improve our search results as well.

The examples we've just described illustrate how libraries can use the wealth of data readily available to all of us to create useful electronic mediation services to assist patrons to use our resources, services, and collections.

Our future plans to design new mediation services, making our website easier to navigate, and more responsive to patron's needs, are discussed below.

We know, based on our transcript analysis and knowledge gleaned from complaints by faculty and graduate students, that the process of requesting material through Interlibrary Loan (ILL) is often more frustrating and confusing for patrons than we would like it to be. At UC Irvine we hope to create "decision trees" that a patron can use to help find information pertinent to his or her question, or connect the patron to the Ask a Librarian chat widget. An ILL decision tree could be linked from our ILL web pages, but could also be retrieved by using metadata, as we did with our tutorials, so that they appear near the top of search results, if a patron queries our web site about ILL. Other places to embed decision trees might be within FAQs. Below is an example of what an ILL decision tree might look like for UC Irvine:

- A. Are you looking for information about how to request something through ILL?**
- a. If you are affiliated with UCI (faculty, staff, student) click here
 - i. Do you need help requesting an article?**
 - 1. See ILL form for articles at http://ucelinks.cdlib.org:8888/citation/sfx_local?rft.genre=article
 - 2. View a tutorial on using ILL to request articles
 - 3. Does this answer your question? If not
 - a. Ask a Librarian
 - b. Return to previous page
 - ii. Do you need help requesting a book?**
 - 1. See ILL form for books at http://ucelinks.cdlib.org:8888/citation/sfx_local?rft.genre=book
 - 2. View a tutorial on using ILL to request books
 - 3. Does this answer your question? If not
 - a. Ask a Librarian
 - b. Return to previous page
 - iii. Do you need help putting in a request for something else?**
 - 1. Ask a Librarian
 - 2. Return to previous page
 - iv. Do you need to request something from the Grunigen Medical Library to be delivered to the Main Campus?**
 - 1. See web pages about "Transfers" at <http://www.lib.uci.edu/services/ill/interlibrary-loan.html>
 - 2. Does this answer your question? If not
 - a. Ask a Librarian
 - b. Return to previous page

Embedding tutorials strategically is another way to make websites more inviting and easier to use. With free software, such as jing (<http://www.jingproject.com/>), or for-purchase software, like Camtasia (<http://www.techsmith.com/camtasia.asp>), tutorials for point-of-need assistance are becoming easier to create. We will use web site analytic software to determine how often the tutorials are being used and if they are being placed on the appropriate web pages.

While we are still in the process of creating and implementing decision trees, we know that the top priorities for decision trees will be for some of the questions/topics most frequently asked about in reference transactions: finding journal articles; finding books; Interlibrary Loan.

The decision trees, based on specific topics, are examples of static improvements to a library's web site. A dynamic mediation that we would like to implement is already used in the e-commerce world. Instead of the static embedding of a reference chat widget, we hope to create programs that would recognize when a user needs assistance, and have the widget appear only at those times. The data used to determine when and where the widget appears would be based on time and content. Based on our chat transcript analysis we know where our patrons have the most trouble finding information or using our services. We also know, through web site analytics, which library pages are accessed most frequently. We could, using the example of our Interlibrary Loan information pages, determine that if an ILL page is open in the patron's browser for a determined time period, say longer than 2 minutes, a pop-up box would appear offering to connect the patron to a librarian, a service now provided by many commercial sites, such as Longo Toyota:



Longo Toyota web site (<http://www.longotoyota.com/index.htm>)

Finally, we hope to create a “digital concierge,” building upon the different elements and data discussed throughout this paper. Both experience and research tell us that many of our users know that they need help, but that they are unwilling to ask for it. A digital concierge is ideal to address the needs of this large group. If we place a strategically-located box or spotlight on our library home page, we can provide users with a broad decision tree that will offer answers to the most commonly encountered inquiries. If, at any point during this guided process, the user decides that help is needed or if they reach a dead end, the Ask a Librarian service is always prominently available, or may appear as a pop-up chat window. A digital concierge service begins with 2-3 specific questions that will lead users to the information and answers they need. Following the best practices in customer service, questions are asked in a friendly and non-threatening manner. For example, the transaction can begin with a friendly “If this is the first time you’ve

visited our site, or you're trying to do something new, you can help me help you by answering a few questions" followed by questions like "Are you an undergraduate?" "Are you conducting research?"

Digital Concierge: Tell me a little bit about who you are and what you're looking for so that I can help you.

1: Are you:

- An undergraduate
- A graduate student
- A faculty member

2: What would you like to do?

If undergraduate:

A. Find something that's "On Reserve"

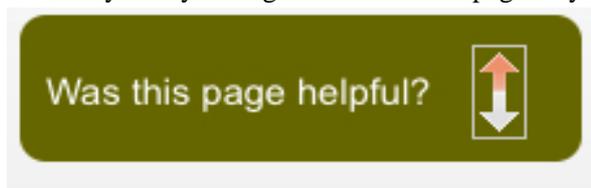
- a) Link to Course Reserves information
<http://www.lib.uci.edu/services/reserves/course-reserves.html>

B. Begin my research

- a) The Begin Your Research tutorial will help you get started
<http://www.lib.uci.edu/how/tutorials/LibraryWorkshop/begin.html>

The methods used to create a digital concierge can be as simple as static html pages that link to other html pages depending on what the user selects. More advanced methods such as Flash could be used to offer animation, interactivities, and other dynamic and engaging responses to user actions. We can use scripts that track user paths by following their clicks to refine the decision trees we create, as well as to give valuable statistics to find out what information user are most often looking for. This information can be used to change what we offer on the home page or let us know which type of user may need more hands-on assistance or instruction.

Finally, libraries can implement feedback mechanisms that will supplement the data gathered unobtrusively through web site analytics by asking users if the web page they landed upon helped them:



from California State University, San Marcos Library web site (<http://biblio.csusm.edu/>)

Conclusion

Most libraries have more data from the people who need assistance than they realize. We have a wealth of reference query data through remembered face-to-face interactions and digital reference transcripts. We have feedback systems for comments and complaints, such as a "Contact the Webmaster" where all sorts of general inquiries are made that can assist us in determining where users most need help on our site. Libraries also have data that tells us how patrons move around our web sites. Web site analytics software, such as Google Analytics, offer ways to analyze traffic patterns; this kind of data informs us of the places on our sites where there is a fail point and where users need more assistance. At UC Irvine we have used all of the these types of data to help us decide where to embed the chat reference widget on our site, to improve our patrons' access to information when off-campus by creating the script and placing it

on a site often used by patrons to connect to licensed databases, and to improve the search results of our site by knowing some of the frequently asked questions.

In addition to using data to pinpoint problems, libraries also have information from those who use our site successfully. Statistics on database and service point usage tell us which services and resources are most frequently used by patrons. We know the most-viewed pages on our web site and the most popular searches performed on our site. Bringing the information from those who need help together with information about highly used resources and services allows us to offer customized assistance to our users, thus increasing both the user satisfaction and the user experience.

We believe, with the tools and data now available to us, that we can change how patrons interact with library websites, making it easier for them to find the information they need, and thus making the use of a library's resources and services in the research process more interactive, enjoyable, and rewarding. However, in changing a library's website from a static repository of links to a dynamic service point, we also have to be prepared to challenge old assumptions. Decisions that were made in the past may have to be rethought. For example, during a recent redesign of the UC Irvine Libraries' web site we moved the site search off our home page in order to feature more prominently our consortia catalog search box. If we are going to invest significant time and resources in improving search results we want to make sure that we move the site search back to our home page. Developing metrics for success will help us continuously improve the user experience on libraries' web sites, and move us closer to converting our users from casual browsers to expert users by enticing them to explore and employ our resources proactively with messages that are tailored to their individual needs.

Background Information

We list these references as starting points to find out more about best practices and the current status of electronic performance support systems and web usability studies in academic libraries.

Barker, Philip, Paul van Schaik, and Oladeji Famakinwa . “Building electronic performance support systems for first-year university students,” *Innovations in Education and Teaching International* 44, no. 3 (2007): 243-255.

This paper introduces us to the principles and theory of performance support (in general) and of electronic performance support (in particular). It was particularly useful because it presented a case study of implementing an electronic performance support system in an academic library.

Chen, Yu-Hui, Carol Anne Germain, and Huahai Yang. “An Exploration into the Practices of Library Web Usability in ARL Academic Libraries.” *Journal of the American Society for Information Science and Technology* 60, no. 5 (2009): 953-968.

Summarizes a survey of 113 Association of Research Libraries (ARL) academic libraries. The survey was administered to investigate whether Web Usability Policies/Standards/Guidelines (PSGs) are in place, the levels of difficulty surrounding implementation, the impact of PSGs on actual usability practice, e.g., testing, resources, etc., and the relationship between ARL ranking and usability practice or PSGs.

Cobus, Laura, Valeda Frances Dent, and Anita Ondrusek. “How twenty-eight users helped redesign an academic library web site - A usability study.” *Reference & User Services Quarterly* 44, no. 3 (2005): 232-246.

George, Carole A. *User-center Library Websites: usability evaluation methods*. (Oxford: Chandos, 2008)

Head, Alison and Michael B. Eisenstein. *Lessons Learned: How College Students Seek Information in the Digital Age*. http://projectinfolit.org/pdfs/PIL_Fall2009_Year1Report_12_2009.pdf (accessed April 29, 2010).

Project Information Literacy (PIL) is a national research study based in the University of Washington’s Information School which seeks to understand how college students find information and conduct research—their needs, strategies, and workarounds—for their course work and for addressing issues that arise in their everyday lives. The report provided extremely valuable insights into the information seeking behavior of college students.

Krueger, Janice, Ron L. Ray and Lorrie Knight. “Applying web usability techniques to assess student awareness of library web resources.” *Journal of Academic Librarianship* 30, no. 4 (2004): 285-293.

Lawrence, Dave and Soheyla Tavakol. *Balanced Website Design: optimizing aesthetics, usability and purpose*. (London: Springer, 2007)

Lee, Hur-Li. “Information structures and undergraduate students.” *Journal of Academic Librarianship* 34, no. 3 (2008): 211-219.

Leavitt , Michael O. and Ben Shneiderman. *Research-based Web Design and Usability Guidelines*. (Washington, D.C. : U.S. Dept. of Health and Human Services : U.S. General Services Administration, 2006) <http://www.usability.gov/guidelines/>

Ozok, A. Ant, Quyin Fan and Anthony F. Norcio. “Design guidelines for effective recommender system interfaces based on a usability criteria conceptual model: results from a college student population.” *Behaviour and Information Technology* 29, no. 1 (. 2010): 57-83.

van Schaik, Paul, Philip Barker and Oladeji, Famakinwa. . “Potential roles for performance support tools.” *The Electronic Library* 24, no. 3 (2006): 347-365.

Veldorf, Jerilyn R. “From Desk to Web: Creating Safety Nets in the Online Library,” In *The desk and beyond : next generation reference services*, edited by Sarah K. Steiner and M. Leslie Madden, 120-134. Chicago : Association of College and Research Libraries, 2008.

Appendix A: Chat Reference Transcript Analysis

Number	Question	Additional Assistance	Topic	Books/ Journals	Notes
5338369	Book Hold			Book	Hold on book that was in the stacks
5338266	Business Research	VPN	HTF Business Databases		Definition of Credit Policy for Business Proposal
5337959	Borrowing/Lending Policy	ILL			ILL for non UC student
5337372	Parking				Free Parking near Langson
5335866	Database Problems				Access Medicine Down
5335273	VPN				How to do research from home accessing databases
5333053	VPN				Needed to access JSTOR
5331846	39C Policy		HTF Bill		Carbon emission by airplanes
5331347	Book Renewal			Book	How to renew books from home?
5330958	Staff Inquiry				Who is Head of Library Instruction?
5329134	Journal Access			Journals	IEEE Journal- Librarian Closed Chat at the end of their session while patron was still asking questions
5328650	Article Search			Journals	Needed to find article published in Book

5327569	39C Policy		HTF Bill		Music Piracy
5326334	Community User Services		English Research	Journals	Student (non UC) needed help with Early English history/only on campus access was addressed.
5323567	39C Research	VPN		Journals	Genomic Research
5320147	Journal Access	VPN		Journals	Applied Physics Letters
5319974	Newspaper Access				General 19th century newspapers
5318907	Article Search			Book	Article in a Book call number given
5314856	Article Search	ILL		Journal	(Student disconnected due to time lag)
5313859	39C Policy		HTF Bill		Meat Consumption
5312179	Mircofilm				Non UCI student wanted to know rules for non UC student browsing the microfilm, Librarian found no policy on Microfilm. (Student mentions he's just beginning research doesn't know where to go for British History, this was not addressed)

5310285	Poem Search			Book	Needed to know the process of finding a poem given for a class assignment
5309907	Article Search	UC elink		Journal	Color Categories article
5308775	Article Search				The New Yorker Check Mate article due to time lag patron ended call.
5307193	Find Book/Call number				
5306556	Purchase Chinese Book				Patron had no luck finding a seller for a Chinese book was referred to bibliographer.
5305877	Database Access	VPN			Needed to connect to JSTOR from home
5303408	Research		Articles on female gangs	Journals	
5302367	Library Card Access				
5301989	Location of Sci Bar				
5301639	Affiliate Access to PsycInfo				
5301235	Newspaper Access				Need New University Archives
5301235	VPN			Journal	Access JSTOR database for Article
5297063	Article Search			Journal	Criminology Research for professor

5296620	Book Holding	ILL		Book	UCI student needed a book at UC Merced
5290622	Database Access			Journal	Access JSTOR database for Article
5288617	VPN			Journal	Access PsychInfo and ASC
5288022	Community User Services		Use JSTOR Database on Campus		
5285101	Library Mailing Address				Langsons Mailing Address needed by patron
5282937	Reserve Book-Place Hold				
5282122	Article Search	ILL			
5280262	Research			Journal	Patron needed article by Author about a specific topic he wrote but didn't know how to locate it.
5279807	UC Alumni Library Privileges				
5279018	Research	Database Access		Journal	Domestic Violence
5276552	Find Book/Call number			Book	
5276309	VPN			Journal	
5275651	Reserve Book Limit			Book	
5272447	Multimedia Used in Library				*

5272395	Book Review Information			Book	Student wanted to know where to locate a specific book review
5272131	VPN				Access JSTOR
5270753	Article Search	ILL		Journal	
5263683	Research		HTF Scale	Article	Wanted to find a Scale talked about in an Article
5260328	Research 39C		Medical Merijuana	Article	Medical Marijuana benefits
5260741	Video on Reserve Loan Period				
5256263	Sci Study Center Hours				
5254294	VPN	Article Access			
5251980	Empirical Journal Definition				Patron asked if journals in psych info were all empirical?
5250011	Research		Stats on Asian Am. Suicides		
5246786	Dissertation Search		UCI Dissertation		
5246433	Article Search		1890 Fashion Article		
5245196	Research		Real-estate Rates		