Ten Methods of Improving Quality Service to University of Maryland Graduate Students via "Assertive" Marketing

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Abstract

In 2000 a faculty member of the Chemical and Biomolecular Engineering Department (ENCH) at the University of Maryland (UM), made an unusual request to the Engineering and Physical Sciences Library (EPSL) librarians. She requested a bibliographic instruction session for her students in ENCH 609, the department's introductory graduate seminar.

As surprised as we were, figuring erroneously that graduate students already knew our UM Library resources quite well, the truth has become clear that they obviously do not. Over the past eight years, we have made an assertive, at times even aggressive effort, to introduce the need for vital bibliographic instruction sessions to the fourteen departments EPSL serves, most often at orientations held at the beginning of fall semester.

What is covered during these sessions varies, of course, by department, subject area, enrollment, time allotted, and location, among other things. The general breakdown of a typical session caters to the needs of engineering and the physical sciences, with special considerations given to mathematics and computer science**.**

The unique part of this paper traces not only the progress of obtaining the success rate of 13 of 14 departments during the past two years, but also several of the marketing strategies utilized. For most librarians for whom marketing is a distasteful endeavor (we refer to it as the "M" word), we offer as a bonus, a "Top Ten" list to help to alleviate some of the associated stress that can be involved in selling the library. The list ranges from major points like dealing with rejection to minor ones, like having a little fun using a professor's name for Web of Science's Cited Reference Search.

There is no doubt that for information services we are in an era dominated by Web 2.0 and its enhancements. Still, we have found that both our subject faculty and our graduate students the preferred method of instruction is the in-person interaction, be it in a group or one-on-one. Finally, what we believe has been so instrumental to this success story, coordinating this uniform approach in providing quality service to UM's new graduate student population, is the more than willing attitude of the excellent EPSL librarians and EPSL graduate assistant.

Keywords: graduate students, one-shot instruction, marketing, engineering, physical sciences

How It Started

In 2000, Dr. Cheryl Ehrman, faculty member of the what is now the department of Chemical and Biomolecular Engineering (ENCH), asked University of Maryland (UM) librarians Jim Miller and Bob Kackley at the Engineering and Physical Sciences Library (EPSL) to demonstrate the UM Libraries resources to her graduate students. We were admittedly quite surprised as it was assumed that graduate students were already familiar with these sources, an assumption also reflected in the literature. Helene C. Williams of the University of Washington had similarly figured in 2000 that graduates students should know how to do library research, asking how students could have "survived this long in the educational system without being able to effectively navigate in the library" (H. C. Williams, 2000, p.145). Williams points to a survey

conducted by Richard Dreifuss in 1981 that reported 91% of the responding faculty assumed graduate students already knew "how to use the library" (H. C. Williams, 2000, p.147). Despite our efforts and our understanding for the need for these sessions, we were disappointed, to find students for the first few graduate student sessions from 2000-2002 to be less than cooperative. But it was obvious, despite these subtle protests of our assisting them, they significantly lacked these basic research strategies and knowledge of the proper resources needed for successful graduate work.

A 2003 UK survey of the Joint Information Systems Committee (JISC) of the User Behaviour Monitoring & Evaluation Framework states that graduate students are not so different from undergraduates in that they do not utilize more sophisticated electronic information systems as they progress through their programs. This finding is "unexpected given the high-level of formal background research required" (Johnson, 2003, p. 4). In fact, another 2003 audit conducted by the Graduate Information Literacy Program (GILP) at the Australian National University, 107 Australian graduate students were asked about their information searching skills for database and web searching skills. Of those 107, fifty-one correctly assessed their skill level, while 56 overestimated their skills. With regard to information searching skills not one student underestimated his or her skills (Perret, 2003, p.163). This last fact shows that these students are quite content searching or digging for these valuable ores of critical research with a small garden shovel --- not a very efficient method at all!

By 2004, Electrical and Computer Engineering (ECE) and Mathematics (MATH) had joined the ranks of departments we worked with at the Engineering and Physical Sciences Library by requesting instruction sessions for their new graduate students. In 2005, there was a shift in attitude of the EPSL librarians to undertake a proactive marketing campaign in order to convince more of the fourteen departments that we serve of the need for Bibliographic Instruction (BI) for their graduate students. In that same year, Meteorology, which became soon afterward Atmospheric and Oceanic Sciences (AOSC), became our fifth department followed in 2006 by Civil and Environmental Engineering (ENCE) and Geology (GEOL) all due to the efforts of our concentrated marketing tactics. In each case, the initial class was held in the location of the department's choice: for instance, the Geology students' orientation was given in what is called the Geology Museum on campus.

In addition to just obtaining a class at all, we were often forced to hustle for sufficient time during some of these sessions in order to provide the most critical information, at least, that relates to UM's portal for electronic journals and databases called Research Port. Sometimes this negotiation meant bartering for just an extra five minutes to increase the session from 25 to 30 minutes, and sometimes even less. For most of the sessions, there was often a projector and computer on hand; but many times we had to hook up our EPSL laptop and jump directly into the session minutes after arrival.

By 2007, most of the sessions were repeated at the request of the departments' graduate advisors themselves. More than a month prior to the fall semester of 2007, we contacting three more new departments, to our bibliographic instruction sessions, that is: Aerospace Engineering (ENAE), Bioengineering (BIOE) and Fire Protection Engineering (ENFP). We were able to convince these departments of what other departments around them were doing for their new graduate students in order to help their own students avoid only using Google Scholar to do their research. Finally, in 2008, the lofty goal of securing all 14 of the departments was in sight.

Again, graduate advisors in Physics (PHYS), Mechanical Engineering (ENME), Astronomy (ASTR) and Computer Science (CS) were persistently requested about "when" they would like us to demonstrate UM Libraries' resources (at that time valued over $5.2 million). Physics, Mechanical Engineering and Astronomy were interested in having sessions take place during their orientation times, and we made presentations of varying lengths for each. The only department to not respond was Computer Science, which we will remind next year of the advantages of graduate BI sessions.

By 2008, we were able to give helpful instructional sessions to 13 of the 14 departments for which EPSL has budget lines. Conversely, despite otherwise effective marketing efforts and a high success rate, some departments have withdrawn their requests for our BI sessions. In 2008 we unfortunately lost three departments for whom we had done classes the year before; for example, Electrical and Computer Engineering (ECE) decided to cancel all outside speakers in

order to encourage more quality interaction between faculty and the department's new graduate students.

Marketing

Much of the literature pertaining to graduate bibliographic instruction includes some acknowledgement of marketing efforts at the libraries' respective institutions. Let us begin first with what marketing actually is. For many, selling oneself and even the library's services we believe so strongly in can be considered an uncomfortable task, with the connotation of going to people's individual houses to sell encyclopedias or vacuum cleaners door-to-door. In fact, a trio of librarians who made a presentation at the 2008 Patent and Trademark Depository Library Association Annual Conference in Alexandria, Virginia, entitled, "Marketing & Strategizing Outreach for Patent & Trademark Presentations," referred to marketing as the "M" word (http://www.ptdla.org/ptdladay2008).

The definition forwarded by the American Marketing Association Board of Directors, approved in October, 2007, calls marketing "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large"
(http://www.marketingpower.com/AboutAMA/Pages/DefinitionofMarketing.aspx).

There seems to be no mention of knocking on doors to sell encyclopedias or vacuum cleaners, nor is there, necessarily, any reference to selling used cars, nor a relatively long-term membership to a health club or spa after a thirty-minute mini-tour of a fitness facility. We use the latter example in particular as one of this present paper's authors worked in four different health spas as a salesman, and will later offer several of those real life sales experiences for ideas on how to market instruction programs successfully with the trick of never actually feeling like a salesperson. To continue, from the definition of marketing above, we should take particular note the value of the words "set of institutions," "processes for creating, communicating…", and "value for customers …. society at large", for it must be remembered that libraries, in general, are a "set of institutions" that are "creating" for the "value of customers." The literature on marketing services is especially convincing as to the need for us to step confidently into the role of salespeople with good products and services. In his article "Time to Step Out of the Box and Start Promoting Ourselves," current Special Libraries Association (SLA) President Stephen Abram states that "librarians can not afford to be anonymous and generic" (Abram, 2008, p. 40), particularly with opportunities to be proactively involved in social networking. Similarly, Christina De Castell emphasizes the fact that she has to remind herself that "if we were lawyers, we would promote ourselves and our expertise on our web site. It was time for us to do the same as librarians" (De Castell, 2008, p.13).

In an invaluable article on graduate student seminars, Michael Fosmire states in regard to library instruction that "marketing is defined to be a logical thoughtful appraisal of the opportunities there are for giving instruction and how best to convince the faculty of the usefulness of bibliographic instruction" (Fosmire, 2001, p.30). The potential markets should be appraised and then the appropriate ones targeted (Fosmire, 2001, p.31). Fosmire discovered through his survey on physics graduate students, that approximately half of all academic institutions gave formal instruction specifically in physics (Fosmire, 2001, p.25). Additionally, only 23% of these institutions gave bibliographic instruction at the optimal time and place at the point of need (Fosmire, 2001, p.29). It is no wonder that he then claims that half of the searches performed by graduate students in his study still utilized one-word searching methods (Fosmire, 2001, p.26).

Another example that demonstrates the still all-too-common dearth in awareness on the part of graduate students comes from Barbara Williams from a 2003 American Society for Engineering Education (ASEE) Conference. She reports that collaboration between faculty and librarians is critical in order to prevent graduate students from beginning their search strategies with just "surfing the net." This, in turn, adversely affects their ability to assess the difference between a refereed and non-refereed journal in their research efforts (B. Williams, 2003, p.3565).

Examples of Library Instruction Types

Most descriptions of graduate student bibliographic instruction seem to fit into the category of "librarian-taught, for credit course[s]" (H.C. Williams, 2000, p.163), one-shot offerings, workshops usually held at orientations (H.C. Williams, 2000, p.167), a miscellaneous category composed of workbooks, tutorials, handouts (H.C. Williams, 2000, p.160) or asynchronous instructional material, like links to websites. In this last category, Jennifer Knievel of the University of Colorado discusses her efforts to enhance the relatively unpopulated number of tutorials that are geared only toward graduate students (and junior faculty, for that matter) since there seems to be already be a plethora of undergraduate ones. Knieval's appropriately titled "Publish Not Perish: The Art and Craft of Publishing in Scholarly Journals," recognizes the cold reality facing the vast majority of new graduate students lack of knowledge of the proper resources and methods when it comes to doing their research (Knievel, 2008, p.175).

One example of a librarian-taught, for-credit course is an actual semester-long, one hour credit class entitled, "Introduction to Graduate Library Research Skills" (UCSP 611) for Graduate Students in the School of Management & Technology at the University of Maryland University College (UMUC). UMUC, also, serves a double role as offering extension classes for UM students all over the world. This class is "designed to familiarize students with the online library and information resources" and is taught online by both UMUC librarians and those outside of UMUC (http://www.umuc.edu/programs/grad/courses/ucspcat.shtml). The librarian-taught, for-credit course is the best way to go, obviously, although Helene C. Wilson of the University of Washington (UW) warns that starting up "a 'new' course can be arduous even in systems smaller" than UW (H.C. Williams, 2000, p.165). Similar examples of these courses include the 1993 effort made by the University of Illinois School of Life Sciences for life science graduate students (Schmidt, 1993, p.51). In 1997 at the University of South Africa, a request was made by the Chemistry Department for graduate students and arranged by the Departments of Information Studies and Library Services (Thompson, 1997, p.125). At Wichita State University in a 2003 ASEE conference presentation, Beth Smith spoke about how Industrial Engineering (IE) graduate students there are required to take Engineering Research Writing with a "library component taught by the Engineering Librarian" (B. Smith, 2003, p.2829). In 2005 Judith Currano of the University of Pennsylvania reported that all first year graduate students in the Department of Chemistry were required to take a ten-week course involving major chemistry information sources (Currano, 2005, p.484).

The present paper stresses the momentum in library instruction efforts that "something is much better than nothing" when it comes to telling our graduate student patrons about the important library resources available and how fortunate they are to have access to these many costly sources. Some of the testimonials contained in the actual literature review, despite being a few years old, will attest to why these neglected resources to what most graduate students do not know enough about can be of significant, if not vital, assistance. One of many of the one-shot offerings (which are too many too list, obviously) goes back, historically, to 1985 with efforts by science librarians at Northwestern University to give bibliographic instruction to both graduate students as well as faculty there on the database, Chemistry Abstracts (CAS) Online (Davidson, 1985, p.225).

Some Instruction Content

The material covered in a typical session delivered by EPSL librarians varies greatly, as it depends very much by institution, collection, department, instructor preference, circumstances, and will thus be discussed rather briefly. All of the thirteen sessions begin with the UM Libraries home page, an introduction or review of Interlibrary Loan (ILL) and, at least, a mention of the functions of the catalog. We then typically move on to electronic resources, on which we tend to spend the most time. After disclosing the startling $5.2 million price tag of our print journals, e-journals, and databases (the e-journals and databases are a $3.6 million part of that pie), we stress the to the students the importance of using the portal Research Port as their entry point for using e-journals and databases on as well as off-campus. The portion spent on databases and electronic resources leads into the discussion of Google Scholar, one that can be the "icing on

the cake" of research efforts. For example, it can be really helpful for locating e-mail addresses of authors whose papers seem to exist nowhere else.

Google Scholar is quickly becoming a valuable resource—indexing and abstracting a lot of the same items as our subscription databases, particularly in engineering and the sciences. It has also proven quite useful for interdisciplinary research when many databases and the catalog are organized very much along disciplinary lines. Patrons can log into Google Scholar via UM's Research Port, allowing proxy access to our libraries' electronic holdings. Where applicable, Google Scholar links to these articles and books made available through our electronic journal and database subscriptions, as well as the online catalog. When used in conjunction with library holdings, Google Scholar is demonstrated as a powerful and useful database. Its shortcomings however lie in its largely unstructured search capabilities, which we take a little time to point out the differences between Google's search interface and that of our subscription databases, like Web of Science or the EBSCO platform. Google's famous simple searching does not translate quite so well to the intricacies of advanced research, so generating and using synonyms and limiting the search in some way (we usually demonstrate using a fixed date range, like 2000-2008) become even more necessary when the search mostly relies on keywords. The result is, well, a lot of results—just like its internet counterpart, Google Scholar produces far more hits than subscription databases can or do, which is overwhelming and nearly impossible to deal with individually.

The inherent limitations of Scholar's interface obviate the importance of its demonstration in the session and suggestions for narrowing down the inevitably large list of hits. The UM Libraries System, in acknowledging the use and growing importance of Google Scholar, includes a short web page with suggestions on maximizing efficiency when searching Scholar entitled, "Making Google Scholar Work for You" (http://www.lib.umd.edu/ETC/googlescholar.html) including using advanced search and how to access articles through our libraries' subscriptions. We've found that many students are surprised to learn that Google Scholar is accessible through Research Port and how often they can access what they find there through our journals and databases. Since it is safe to assume that the majority of students of all levels and faculty are utilizing Google Scholar to some degree, and perhaps even more often than our own databases, we believe it helpful to not only demonstrate to how to more effectively use what they are already using (and will likely use anyway), but also a boon to us to promote how available and relevant our resources are.

For the engineering curricula, we offer Academic Search Premier as a general and interdisciplinary database and, time permitting, Compendex, and depending on department, two or three other appropriate databases, which can include IEEE Xplore, Metadex, Biotechnology and Bioengineering Abstracts, and Medline. Quite often, as EPSL is a designated Patent and Trademark Depository Library (PTDL), we present a brief patent search for engineering students (both in graduate and undergraduate classes). Given the relative complexity of patent and trademark research, we tend not to spend much time on the actual searching, so much as we want to introduce and reinforce the idea of using patents. The United States Patent and Trademark Office (USPTO) site (www.uspto.gov) is shown somewhat quickly with the mention of the European Patent Office (ep.espacenet.com) for printing (among other useful plusses) and Google Patents, yes, for speed and very clear images, with the caveat that Google Patents is lacking for comprehensive searching due to its inability to index class/subclass listings successfully. We always refer to students to visit EPSL for a guided session on patent searching if they are interested as it is a United States Patent & Trademark Depository Library.

For the physical sciences as well as Mathematics and Computer Science, Academic Search Premier is usually demonstrated along with Web of Science (which is shown or mentioned in engineering instruction, too, though it tends to be best in the life sciences, chemistry and medicine, then physical sciences, and lastly in engineering). For Mathematics, typically Mathscinet or for Geology Georef is covered, along with Medline, where appropriate. Patents are hardly ever covered unless time permits and can be of help to these particular graduate students.

Finally, the changing scholarly landscape is necessitating a more rigorous approach to citation, and the frustration associated with changing URLs is all too common. Keeping students current with updated citation and style guides can always have a place in instruction sessions. For graduate students in particular, the reliability of bibliographic management software is very

attractive for storing and saving, importing and exporting, and managing and editing the many citations gathered in the process of research. Graduate students are often already quite familiar with these tools, and the number of open source tools like Zotero and now MyEndNoteWeb, available through ISI Knowledge Base, is ever-growing and useful for graduate and undergraduate students alike.

In all, a total of over 35 graduate student classes were taught in the nine years between 2000 and 2009 to 717 grads and 55 faculty members who were present as well at these sessions (in 2008 there were a total of 231 attendees). Sessions averaged about three-fourths of an hour time-wise (25.5 hours total) for each presentation by seven EPSL professionals, who include Neal Kaske (past Head of EPSL), Nevenka Zdravkovska (present Head), Jim Miller, Maureen Cech, Dave Wilt, Nedelina Tchangolova, and Bob Kackley. For a breakdown by year and department, please see Table #1 below.

Table #1

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
ENCH	X	X		X	X	X	X	X	X	8
MATH			X			X	X	X	X	5
ECE			X		X	X	X	X		5
BIOE					X			X	X	3*
METY						X	X	X	X	4
ENCE							X	X	X	3
GEOL							X	X	X	3
ENAE								X		1
ENFP								X		1
ENMA									X	1
ASTR									X	1
PHYS									X	1
ENME									X	1

* was actually combined with ENCH (increases total by one)

| | 1 | 1 | 2 | 1 | 3 | 4 | 6 | 9 | 10 | 37* |

Top Ten

1. **Believe in your product:** Unless you are in a situation in which you are peddling questionable automobiles in a used car lot--and you are really good at it--you have to believe in your product. Even working in an industry as risqué as the health spa business, one can still have his heart in the fitness aspect of the field. If people whom present author, Bob Kackley, had signed up for long-term contracts quit coming in, they would be called and questioned about why they were not coming in to the facility. In that same light, one in the information services field has to believe in the importance of what we are showing graduate students and all of our "customers" in the way of peer-reviewed databases and e-journals, along with developing better search strategies.

2. **Relate what we have to offer (Better, faster searches):** As mentioned before, the UM Libraries currently spends about $3.6 million a year on authenticated databases and e-journals, along with another $1.6 million on print journals. We cannot additionally discount the vital service of demonstrating the above-mentioned higher quality search strategies. And, of course, one must not overlook the time saved in knowing how to conduct more complex and thus more successful searches (that is, no one-word searches).

3. **Be persistent, but not too much so:** There is nothing wrong with being persistent and no one can fault you for doing your job. But a potential "customer" could be lost forever if tactics are too aggresive. There is a fine line that can be difficult to identify.

4. **Be polite in correspondence:** Even though we may live in a time where the protocols of politeness have seemingly been flung out the window, it is so important to use phrases like "I really appreciate" that reflect a certain amount of gratitude for taking up the customers' time. Less intense ways of expressing a suggestion also tend to sound much better using "I would like" or "I wish" rather than "I want."

5. **A good salesperson learns to quickly smooth over rejection:** One of the first lessons learned in the health spa business is that when one gets turned down, immediately begin smoothing over the situation. If this is not done, you very well could lose the customer for good. One's own insecurities can cause a negative reaction to a rejection to persist although the professor may very well have a good reason for not wanting a session, be it now or in the near future**.** Maintaining a positive outlook in order to smooth over a rejection leaves open the door for further contact at another opportunity.

6. **Always be friendly and respectful toward the department's support staff:** Since they may be the ones responsible for setting up your instruction session, support staff deserve a lot of credit and respect which should be shown that accordingly. This is especially true when the next year's round of orientations come around as they will probably even contact you first.

7. **Be flexible and willing to go to their turf:** Particularly during orientations, the schedules can be extremely tight. There is nothing wrong with bartering for an extra five or ten minutes, but accept what you can obtain with the knowledge that this session is getting a foot in the door. Working your way into department's schedule will then usually mean giving the demonstration to the graduate students in a room of their choosing.

8. **Use as justification numbers and examples of successful sessions:** Put in as many requests as possible, if not in person, via e-mail. Once you have welcomed some departments into the fold, there is nothing wrong with pointing out those previous successes to use as a springboard for others to be targeted. It will become easier and snowball. (Fosmire, 2001, p.33) Another potentially successful tactic, if tastefully employed, that they are the only ones NOT taking advantage of how the UM Libraries can assist their grad students with important research tips.

9. **Ensure that attendance for the class is mandatory:** We are still learning the hard lesson that if there is not a distinct orientation or class associated with the demonstration, the turnout will usually be disappointingly low. Even a well-intentioned brown bag lunch can produce a low turnout. Make sure the faculty or representatives with whom you work understand the time and effort you are willing to put into one of these sessions and why it should be mandatory for students to attend.

10. **Use the responsible professor at the session in a Science Citation Index Cited Reference Search:** It is important to get permission first, so as not to embarrass this person in some fashion (watch out particularly for references that though well cited, may reflect the professor's age in a negative way). This little addition can really make him or her feel that much more appreciated for his or her work in that field.

BONUS TIPS: Contact the departments well in advance to ensure that the libraries have not been forgotten in the planning of orientations. It is in your best interest to obtain as much information about the session as possible, from head counts to the exact time of the session to be given. One final thing to keep in mind is that it is still important to be constantly reviewing the content of your sessions in order to keep it accurate as well as indispensable (Fosmire, 2001, p.33). We have taken this advice to heart particularly as we revamped our sessions to include a much heavier emphasis on the use of Google Scholar via UM Libraries' Research Port.

Closing Thoughts

Some other considerations that may need to be taken into account are that this article does not incorporate any data or component related to physical or psychological perceptions that may measure how effectively these graduate students pick up information from these one-shot sessions and the degree to which they are able to utilize them, unlike a conclusion made from a

study at the University of Oklahoma (C. Brown, 1999, p.426). Another interesting tidbit from this same 1999 article shows the extensive demonstration of Indexes and Abstracts (very prevalent at that time), the need for which a very recent article by Nevenka Zdravkovska from the University of Maryland, understandably, questions, particularly in this era of Google Scholar as well as other free and open sources (Zdravkovska, 2008, p.152). In a 2001 article by Korolev from Wayne State University, another factor is introduced: about 30% of their graduate school Chemistry students were international students with, from personal observations, a very different frame of reference (Korolev, 2001, p.35). Another method of assistance to both graduate and Ph.D. students discussed in the literature we have not discussed here involves portfolios, a method of very in-depth research assistance. One well-done example from Ecole Polytechnique de Montreal describes the steps that used in setting up such a portfolio on a research topic (Dumont, 2005, p.27).

In conclusion, despite the fact that some of our supporting observations were made a few, or even more than a few, years ago, graduate students may still need our library instruction more than ever. The confusion surrounding research methods has moved on from how to manipulate library resources with their controlled search interfaces and more precise algorithms toward unknown (and maybe even commercially tweaked?) ranking systems done by open web search engines similar to Google.com. We cannot discount the effectiveness of the one-shot session, echoing Michael Fosmire's sentiments from 2001 that we are reaching a wider audience by staging these one-shot sessions (Fosmire, 2001, p.29). The most obvious factor in convincing librarians, faculty, and the graduate students themselves is the prevalent ignorance of what sources we have via our university libraries as compared to the often incomprehensive and biased results of the open web. It seems that once faculty become believers in what we are trying to show them via instruction sessions to their graduate students, they are quite happy in talking about and sharing it with their academic peers (Fosmire, 2001, p.32).

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